PB82-130709

Mill Creek Area, Jefferson County, Kentucky Wastewater Facilities. Appendix A Financial Impact Analysis

Gannett Fleming Corddry and Carpenter, Inc.
Harrisburg, PA

Prepared for

Environmental Protection Agency
Atlanta, GA

Sep 81

U.S. Department of Commerce
National Technical Information Service
NTIS

BIBLIOGRAPHIC DATA SHEET

1. Report No.
904/9-81-079a

2.

3. Recipient's Accession No.
PB82 130709

4. Title and Subtitle
Draft Environmental Impact Statement, Mill Creek Area, Jefferson County, Kentucky Wastewater Facilities, Appendix A Financial Impact Analysis

5. Report Date
September 1981

6. 335416

7. Author(s)
EIS Branch, EIS Preparation Section

8. Performing Organization Rept. No.

9. Performing Organization Name and Address
U.S. EPA, EIS Branch
345 Courtland Street
Atlanta, GA 30365

10. Project/Task/Work Unit No.

11. Contract/Grant No.

12. Sponsoring Organization Name and Address
Same as box 9.

13. Type of Report & Period Covered
Draft

14.

15. Supplementary Notes

16. Abstracts

This draft EIS addresses proposed wastewater facilities for the Mill Creek ARea of southwest Jefferson County, Kentucky. Numerous wastewater management alternatives ranging from complete reliance on existing on-site systems to a full regional system were evaluated in this EIS. At issue in the Mill Creek Area EIS is the need for EPA to provide Federal funds for sewer service to residential areas, currently served by individual on-lot systems and the provision of sewer service to the Louisville-Jefferson County Riverport Industrial Park.

The Draft EIS preferred alternative involves a limited sewer alternative in which the Dixie Highway commercial strip and most, if not all, of the 26 small wastewater treatment plants will be served by a limited sewer. It is proposed that residential areas now served by on-lot systems in the Mill Creek area will remain on these systems.

→ PA-1

17. Key Words and Document Analysis. 17a. Descri ors

Jefferson County Kentucky

Mill Creek
Sewer

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group

18. Availability Statement

19. Security Class (This Report)
UNCLASSIFIED

20. Security Class (This Page)
UNCLASSIFIED

21. No. of Pages

22. Price

PB82-130709

United States
Environmental Protection
Agency

Region 4
345 Courtland Street, NE
Atlanta, GA 30365

EPA 904/9-81-079a
September 1981

EPA

Environmental Impact Statement

Draft

Mill Creek Area
Jefferson County, Kentucky
Wastewater Facilities

Appendix A
Financial Impact Analysis

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U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV ATLANTA, GEORGIA

FINANCIAL IMPACT ANALYSIS
APPENDIX A

for

THE MILL CREEK AREA
ENVIRONMENTAL IMPACT STATEMENT
JEFFERSON COUNTY, KENTUCKY

Prepared by
Gannett Fleming Corddry and Carpenter, Inc.
In Association With
Claude Terry & Associates, Inc.

September 1981

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1. PURPOSE

This financial analysis has been carried out to determine the likely impacts on the Louisville and Jefferson County Metropolitan Sewer District (MSD), MSD's customers, and residents in the Mill Creek EIS study area of various alternative wastewater management approaches. The study was initiated by U.S. EPA to address concerns raised by agencies of Jefferson County and the Commonwealth of Kentucky regarding the financial feasibility of EIS alternatives. Financial feasibility has been examined by developing projected revenue needs and customer service charges for alternative approaches in Mill Creek, ranging from no federal action to regional sewerage system.

2. SUMMARY AND CONCLUSIONS

2.1 Summary

The financial impacts of several wastewater management alternatives were evaluated by developing cash flow projections for the MSD system under the following conditions:

1. Scenarios 1 and 2 involved construction of a regional sewerage system in the Mill Creek area;
2. Scenarios 3 and 4 involved no federal action, and therefore no public sewerage system in the Mill Creek area; and
3. Scenarios 5 and 6 involved two limited public sewer systems in the Mill Creek area.

Cash flow projections were made by developing postulated capital improvement programs for each of the scenarios. Capital improvement expenditures were disaggregated into planning, engineering, land acquisition, and construction costs. The timing of capital improvement activities and number of customers to be served by each project were additional inputs to the cash flow model. Revenue needs and customer service charges were determined for each scenario by utilizing a cash flow model developed by MSD. Costs of wastewater management to Mill Creek residents not served by MSD were projected under the same economic circumstances as those used in cash flow modeling.

Significant findings of the financial impact analysis are as follows:

1. All scenarios showed essentially the same revenue requirements and customer service charges through 1995.
2. Mill Creek activities had no noticeable effect on either MSD's revenue requirements or projected MSD customer service charge.
3. Projected MSD customer service charges were consistently larger than projected costs of service allocable to Mill Creek MSD customers.
4. Public sewerage projected costs appeared to be consistently lower than projected costs for existing private wastewater management systems.
5. Annual costs of wastewater management projected for future Mill Creek residences would be lowest for septic tanks with seepage pits and highest for small area wastewater treatment systems.

2.2 Conclusions

1. Through 1995, MSD activities in the Mill Creek area ranging from a complete regional sewerage system to no public system at all would have essentially the same financial impact.
2. Residences in the Mill Creek area currently served by small private sewerage systems would benefit from the substantially lower service charges projected for MSD customers.
3. The least costly wastewater management alternative, of those studied, for new residences in the Mill Creek area would be a septic tank with seepage pit. Regional sewers and large-scale treatment would be significantly less costly to new residences than small area wastewater treatment systems.

3. BACKGROUND

3.1 MSD Authority

MSD was created in 1946 when legislation was passed authorizing the creation and establishment of "districts" between first and second class cities and their surrounding counties for the purpose of providing adequate sewer and drainage facilities. Since Louisville is the only first class city in Kentucky, MSD is thus unique as the first and only metropolitan sewer district in Kentucky. By encompassing all of Louisville and Jefferson County, MSD serves just over 20% of the State's population. MSD has authority, under Kentucky Revised Statutes, Chapter 76, to control the design and construction of sewer and drainage facilities built by others. MSD is the agency responsible for approval of plans for sewers and drains, for determining the adequacy and feasibility of proposed improvements, and for inspecting and supervising construction where deemed necessary for the public welfare. This oversight authority applies to any person or corporation, public or private, including incorporated areas, sewer construction districts, and sanitation districts. In addition MSD issues design criteria for sanitary sewers for the use of all developers and engineers designing work for construction in Jefferson County.

3.2 Previous Wastewater Management Planning

In 1964, the first master plan for the development of a system of sanitary sewage collection and disposal for that part of Jefferson County lying outside the corporate limits of the cities of Louisville and Shively was prepared by Hazelet and Erdal and Burns and McDonnell, consulting engineers. The Master Plan proposed the elimination of septic tanks and other individual treatment plants through construction of sewers in all areas developed to urban or suburban population densities or developed for industrial use. In addition to the existing Fort Southworth Wastewater Treatment Plant (later renamed Morris Forman), two major treatment plants were proposed, one to serve the North Jefferson County area, the other to serve the West Jefferson County area.

3.3 201 Facilities Planning

In 1973, the Kentuckiana Regional Planning and Development Agency (KIPDA) initiated the preparation of a facility plan under Section 201 of PL 92-500. The 201 Plan was prepared by Schimpeler-Corradino Associates. The 201 Plan generally recommended implementation of the 1964 Master Plan. The recommended system involved a three plant regional system with two interim facilities being phased out by the end of the planning period. Recommendations of the 201 Plan for the Mill Creek Basin are shown on Figure 1.

In May 1975, following review of the 201 Plan by the Kentucky Department for Natural Resources and Environmental Protection (KDNREP) and EPA, it was determined that the Kentucky portion of the Water Quality Management Plan was substantially complete. An Environmental Impact Appraisal was prepared by EPA documenting the decision that an EIS was not required. This determination allowed EPA Region IV to commit federal construction grant funds to several design and construction projects in Jefferson County.

3.4 The Mill Creek EIS

Following EPA review and approval of the 201 Plan, several points of controversy became evident. In March of 1977, the Southwest Jefferson County Homeowners Association forwarded a letter to the President's Council on Environmental Quality (CEQ) and the U.S. Attorney General with a copy to EPA requesting a complete Environmental Impact Statement (EIS) on the 201 Study. At the end of 1977, the Homeowners Association filed suit in U.S. District Court to enjoin EPA and MSD from proceeding with implementation of the 201 Plan. Additionally, the Homeowners Association requested that a "full comprehensive Environmental Impact Statement be prepared for the Riverport industrial park, the West County Wastewater Treatment Plant, and connecting interceptors that are in the process of being constructed in Southwest Jefferson County, Kentucky."

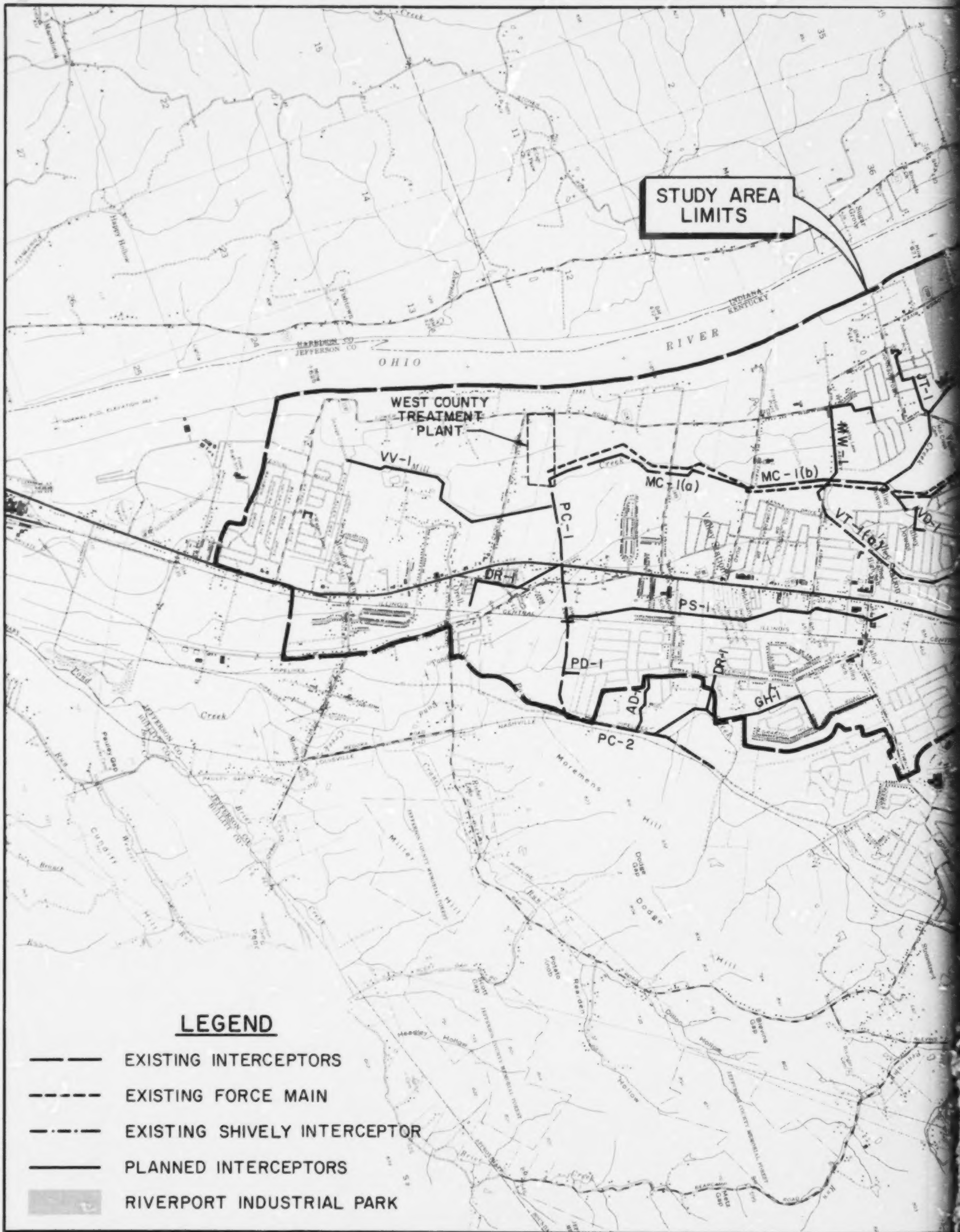
After reviewing the general situation in the MSD service area, EPA issued a Notice of Intent to prepare an EIS on certain lines located in the West County area in September, 1977. This decision was predicated upon certain citizen concerns over the effects of development of the Riverport project on the sewer plan and the cost of sewer connection to homeowners in the Mill Creek area. EPA further resolved that significant controversy and unresolved issues surrounded the 201 Plan recommendations for the Mill Creek Basin portion of the West County area, and a Notice of Intent to prepare an EIS on this portion of the 201 study area was issued on May 17, 1978. At issue in the Mill Creek basin was the need for MSD to provide sewer service to some residential areas currently served by individual on-lot disposal systems and the provision of sewer service to the Louisville-Jefferson County Riverport Industrial Park.

The Mill Creek EIS study area is delineated in Figure 2. During the EIS process, several wastewater management alternatives were developed, ranging from on-site systems for the entire study area to the regional sewerage system proposed by the 201 Plan. These alternatives were evaluated for cost, environmental and socio-economic impacts, technical feasibility, and implementation problems.

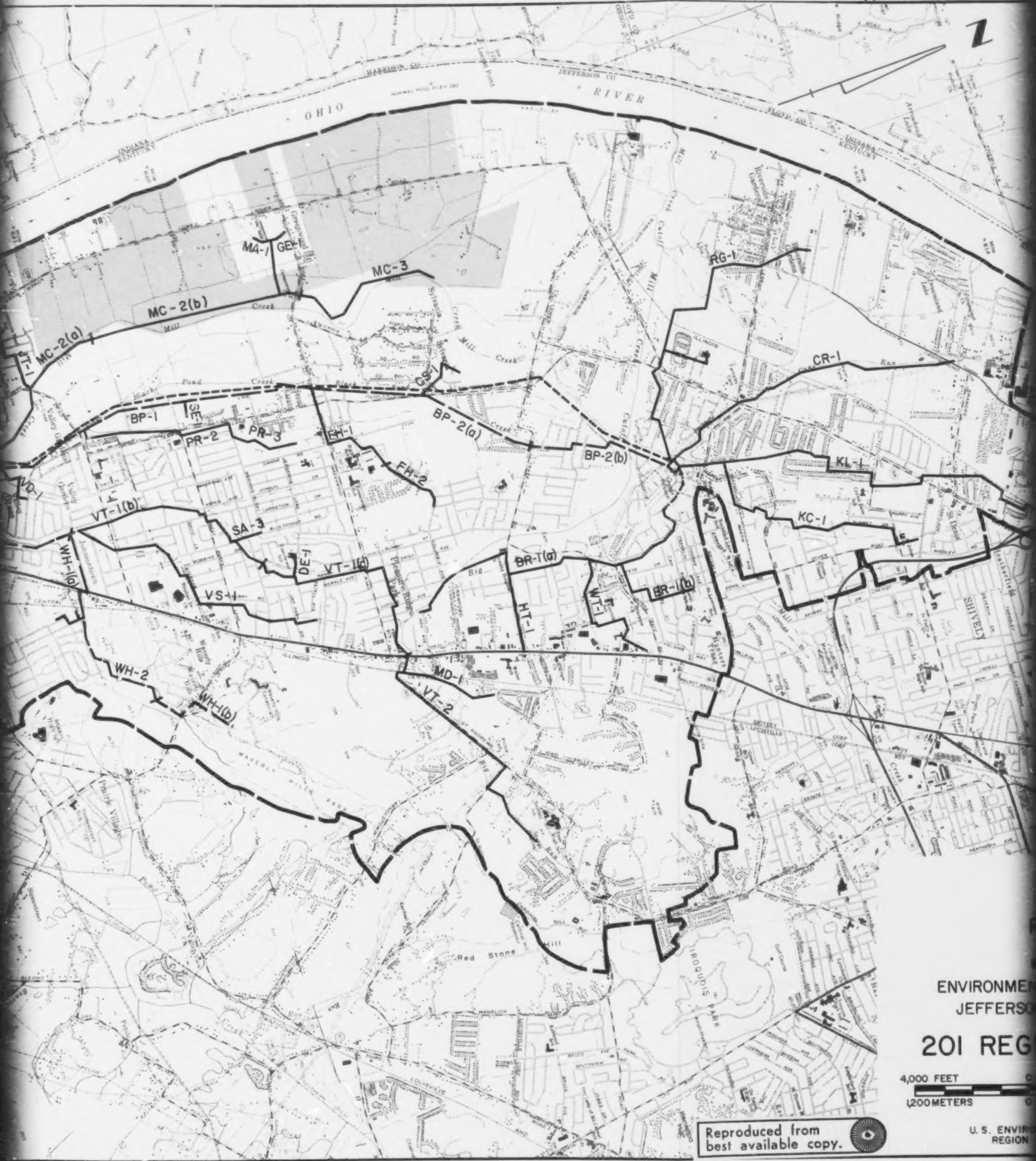
3.5 EPA Louisville-MSD Review Team

At the direction of EPA's Regional Administrator, an EPA Louisville-MSD Review Team was established in June 1980 to review several major problem areas related to the Louisville and Jefferson County Metropolitan Sewer District. One question that was examined was the issue concerning the financial impact of the Mill Creek EIS alternatives on MSD's cash flow.

The report of EPA's Louisville-MSD Review Team addressed the question of the various EIS alternatives on MSD's cash flow and included a recommendation that the EIS be expanded to include an economic component showing the impact of the EIS alternatives on MSD. To conform to the recommendations of the Review Team Report, the Mill Creek area EIS was expanded to include a Financial Impact Analysis.


STUDY AREA LIMITS
WEST COUNTY TREATMENT PLANT
OHIO
RIVER
INDIANA
KENTUCKY
HARRISON CO
JEFFERSON CO
VV-1
MC-1(a)
MC-1(b)
MW-1
JT-1
VT-1(a)
VD-1
PC-1
DR-1
PS-1
PD-1
AD-1
DR-1
GH-1
PC-2
Creek
Moremens
Hill
Dodge
Hill
LEGEND
EXISTING INTERCEPTORS
EXISTING FORCE MAIN
EXISTING SHIVELY INTERCEPTOR
PLANNED INTERCEPTORS
RIVERPORT INDUSTRIAL PARK

A-5


OHIO
RIVER
INDIANA
KENTUCKY
HARRISON CO
JEFFERSON CO
FLOYD CO
MC-2(a)
MC-2(b)
MC-3
MA-1
GE-1
T-1
CS-1
BP-1
BP-2(a)
BP-2(b)
SE
PR-2
PR-3
FH-1
FH-2
RG-1
CR-1
KL-1
KC-1
VD-1
VT-1(b)
VT-1(a)
VT-2
SA-3
DE-1
VS-1
WH-1(a)
WH-1(b)
WH-2
BR-1(a)
BR-1(b)
HT-1
WT-1
MD-1
Mill Creek
Pond Creek
Big
Creek
Pleasure Ridge Park
Valley Station
SHIVELY
St Denis
Prairie Village
Red Stone Hill
IROQUOIS PARK
ILLINOIS CENTRAL
ILLINOIS
Mill
Creek
Cutoff
Run

ENVIRONMEN
JEFFERSO

201 REG

4,000 FEET 0

1,200 METERS 0

U. S. ENVIRO
REGION

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A-5

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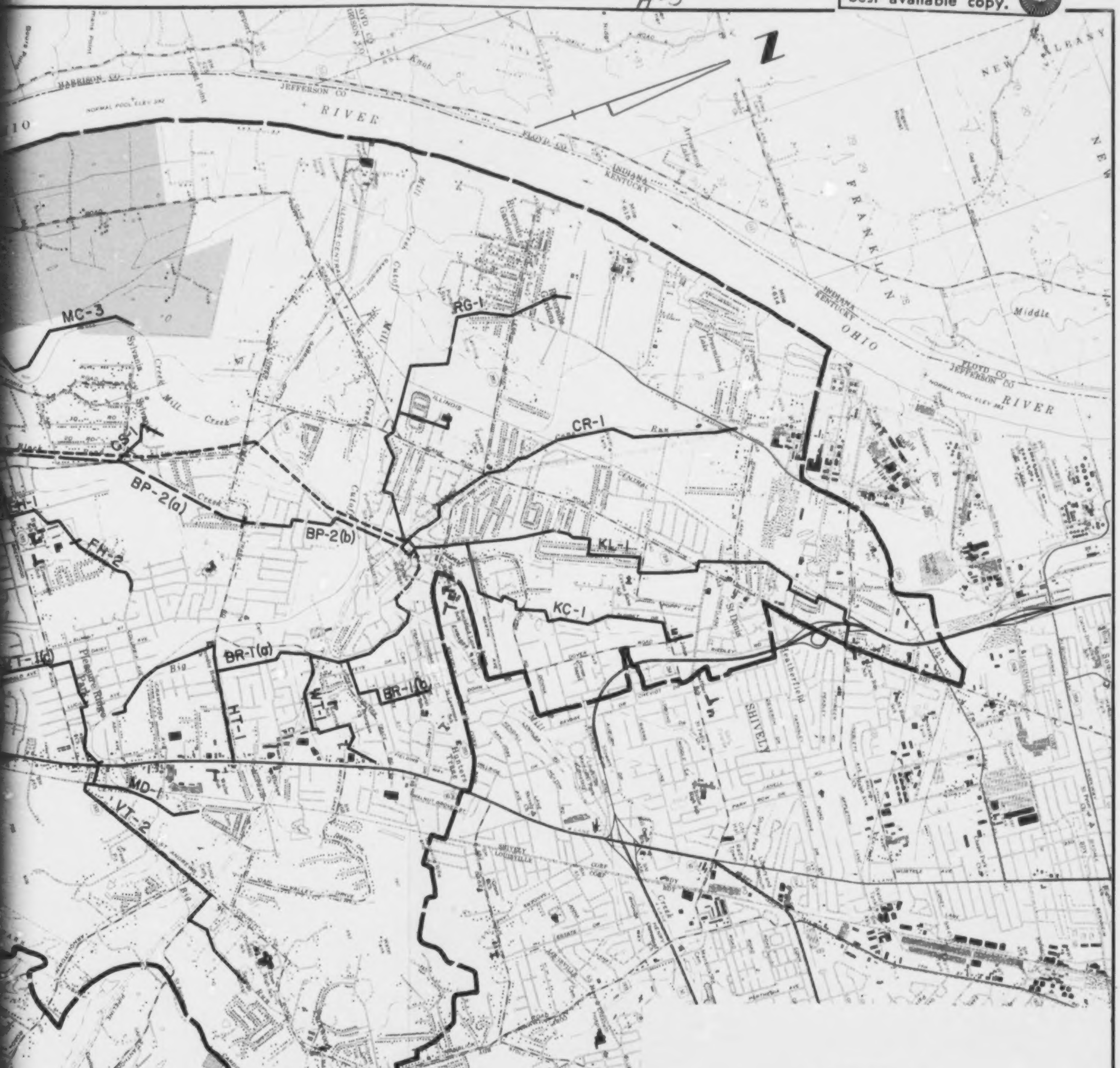
OHIO
RIVER
HARRISON CO
JEFFERSON CO
FLOYD CO
INDIANA
KENTUCKY
NORMAL POOL ELEV. 382
FRANKLIN
NEW ALBANY
NEW
Middle
MC-3
RG-1
CR-1
GS-1
BP-2(a)
BP-2(b)
FH-1
FH-2
KL-1
KC-1
BR-1(a)
BR-1(b)
WT-1
HT-1
MD-1
VT-2
VT-1(d)
Mill Creek
Big
SHIVELY
St. Denis
Red Stone Hill
IROQUOIS PARK
4,000 FEET
0
4,000
8,000
1,200 METERS
0
1,200
2,400

FIGURE I

MILL CREEK
ENVIRONMENTAL IMPACT STATEMENT
JEFFERSON COUNTY, KENTUCKY

201 REGIONAL SYSTEM

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV ATLANTA, GEORGIA

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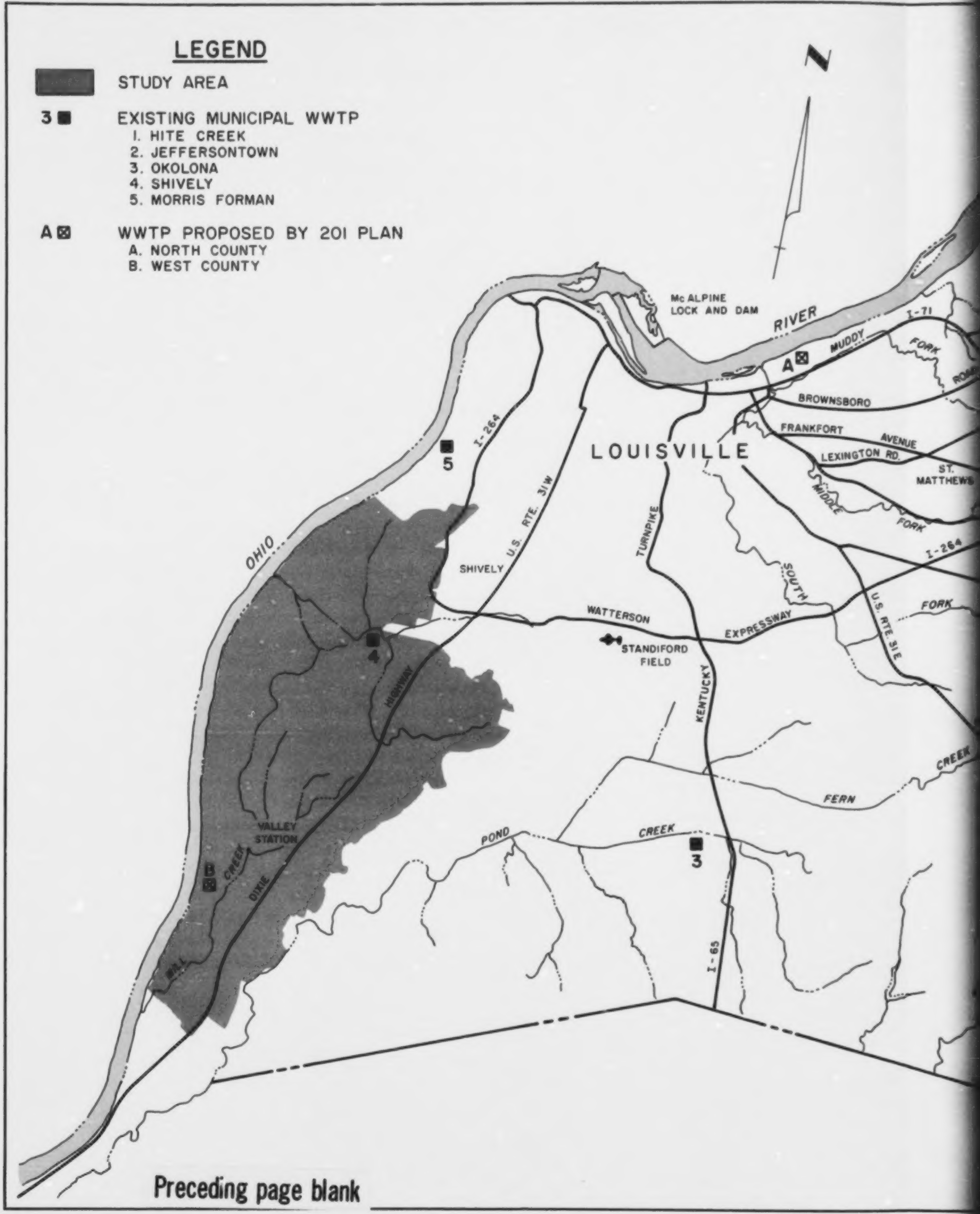
LEGEND
STUDY AREA
3 ■ EXISTING MUNICIPAL WWTP
1. HITE CREEK
2. JEFFERSONTOWN
3. OKOLONA
4. SHIVELY
5. MORRIS FORMAN
A ⊠ WWTP PROPOSED BY 201 PLAN
A. NORTH COUNTY
B. WEST COUNTY
N
Mc ALPINE LOCK AND DAM
RIVER
OHIO
I-71
MUDDY
FORK
A
BROWNSBORO
FRANKFORT
AVENUE
LEXINGTON RD.
ST. MATTHEWS
MIDDLE
FORK
LOUISVILLE
I-264
5
U.S. RTE. 31W
TURNPIKE
SHIVELY
SOUTH
FORK
I-264
U.S. RTE. 31E
WATTERSON
EXPRESSWAY
STANDIFORD FIELD
4
HIGHWAY
KENTUCKY
CREEK
FERN
VALLEY STATION
POND
CREEK
3
B
CREEK
DIXIE
MILL
I-65

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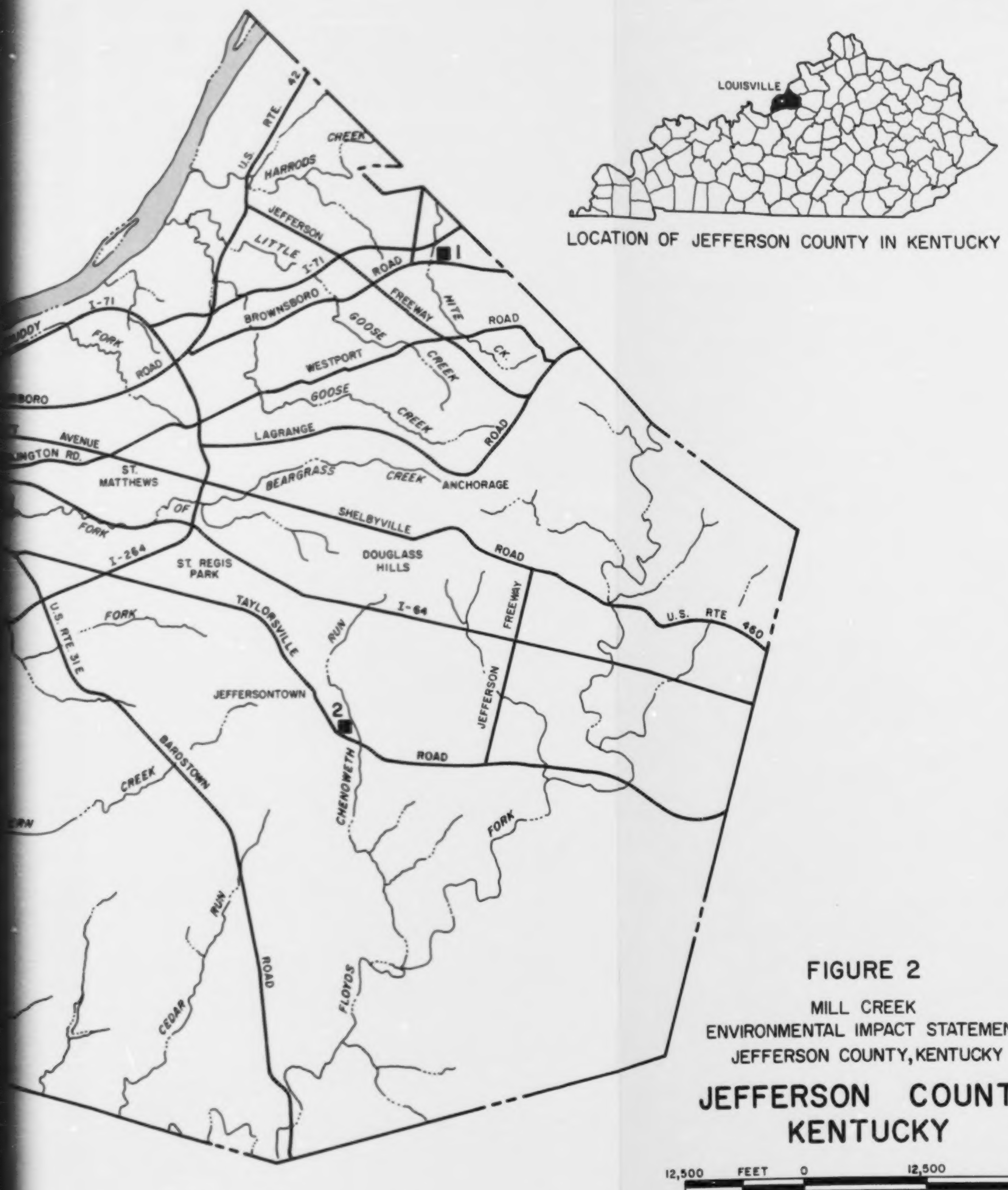
LOUISVILLE
U.S. RTE. 42
HARRODS CREEK
JEFFERSON ROAD
LITTLE
I-71
FREEWAY
HITE CK.
ROAD
BROWNSBORO
GOOSE CREEK
WESTPORT
FORK
ROAD
GOOSE CREEK
LAGRANGE ROAD
AVENUE
INGTON RD.
ST. MATTHEWS
BEARGRASS CREEK
ANCHORAGE
OF
FORK
SHELBYVILLE ROAD
I-264
ST. REGIS PARK
DOUGLASS HILLS
TAYLORSVILLE
I-64
FREEWAY
U.S. RTE 460
U.S. RTE. 31E
FORK
RUN
JEFFERSON
JEFFERSONTOWN
1
2
ROAD
BARDSTOWN
CREEK
CHENOWETH
FORK
CEDAR
RUN
ROAD
FLOYDS

LOCATION OF JEFFERSON COUNTY IN KENTUCKY

FIGURE 2

MILL CREEK
ENVIRONMENTAL IMPACT STATEMENT
JEFFERSON COUNTY, KENTUCKY

JEFFERSON COUNTY
KENTUCKY

12,500 FEET 0 12,500 25,000
3,800 METERS 0 3,800 7,600

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV ATLANTA, GEORGIA

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4. THE FINANCIAL IMPACT STUDY

4.1 Introduction

Preparation of the financial impact analysis involved detailed cash flow projections for six scenarios which include four of the EIS alternatives. The system alternatives evaluated for the Financial Impact Analysis are listed in Table 1. As noted in the table, each alternative requires action to be taken for three general classes of population (population presently sewered, population presently served by on-site systems, and future population). The assumptions for each of the six scenarios are provided in this section.

4.1.1 Scenario 1 Assumptions - EIS Alternative 6

1. MSD is fully committed to the Corrective Action Plan at the Morris Forman Treatment Plant except that construction of the so-called Side-stream Plant (completion scheduled for March 1985) is contingent upon EPA funding.
2. The West County Wastewater Treatment Plant will be constructed by a traditional single prime contractor-type of contract, with start-up beginning in April 1988. It will be a 45 mgd plant.
3. Connection of the Okolona system and construction of the Northern Ditch Diversion Structure will be scheduled for completion to coincide with start-up of the West County Plant.
4. Initial Master Plan projects constructed will be in the West County EIS area, followed by Pond Creek Phase II (Prairie Village and Fairdale) and then North County Phase I.
5. The North County Wastewater Treatment Plant will be a 6 mgd plant, with start-up beginning in July 1995.
6. Proceeds of revenue bond sales will be available on July 1 of the fiscal year indicated. Rate increases will also take effect on July 1 of the appropriate year.
7. Construction and engineering costs increase at a compounded annual inflation rate of 8.3 percent. Power costs increase at a compounded annual inflation rate of 13.15 percent.

4.1.2 Scenario 2 Assumptions - EIS Alternative 6

1. MSD is fully committed to the Corrective Action Plan at the Morris Forman Treatment Plant except that construction of the so-called Side-stream Plant (completion scheduled for March 1985) is contingent upon EPA funding.
2. The West County Wastewater Treatment Plant will be constructed by a traditional single prime contractor-type of contract, with start-up beginning in April 1988. It will be 45 mgd plant.

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TABLE 1. ALTERNATIVE WASTEWATER TREATMENT SYSTEMS

EIS ALTERNATIVE	POPULATION PRESENTLY SERVED BY SMALL TREATMENT PLANTS	POPULATION PRESENTLY SERVED BY SEPTIC TANKS	FUTURE POPULATION
6. 201 Regional System	Abandon WWTPs; connect to regional conveyance and treatment system	Connect to regional conveyance and treatment system	Connect to regional conveyance and treatment system
7b. Limited Regional System	Abandon some WWTPs and connect to limited regional system; continue use of others	Connect to limited regional system the commercial establishments along Dixie Highway; continue use of septic tanks for others	Use septic tanks
7c. Limited Regional System	Abandon some WWTPs and connect to limited regional system; continue use of others	Connect to limited regional system the commercial establishments along Dixie Highway; continue use of septic tanks for others	Connect to limited regional system
9. No Federal Action	Continue use of WWTPs	Continue use of septic tanks	Connect to new WWTPs

3. Connection of the Okolona system and construction of the Northern Ditch Diversion Structure will be scheduled for completion to coincide with start-up of the West County Plant.

4. Initial Master Plan projects constructed will be in the Pond Creek Phase II area (Prairie Village and Fairdale), followed by Okolona Expansion and then the West County EIS area. North County Phase I construction follows the West County EIS area.

5. The North County Wastewater Treatment Plant will be a 6 mgd plant, with start-up beginning in October 1995.

6. Proceeds of revenue bond sales will be available on July 1 of the fiscal year indicated. Rate increases will also take effect on July 1 of the appropriate year.

7. Construction and engineering costs increase at a compounded annual inflation rate of 8.3 percent. Power costs increase at a compounded annual inflation rate of 13.15 percent.

4.1.3 Scenario 3 Assumptions - EIS Alternative 9

1. MSD is fully committed to the Corrective Action Plan at the Morris Forman Treatment Plant except that construction of the so-called Sidestream Plant (completion scheduled for March 1985) is contingent upon EPA funding.

2. The West County Wastewater Treatment Plant will be constructed by a traditional single prime contractor-type of contract, with start-up beginning in April 1988. It will be 30 mgd plant. Expansion to a 45 mgd plant will be complete in April 1994.

3. Connection of the Okolona system and construction of the Northern Ditch Diversion Structure will be scheduled for completion to coincide with start-up of the West County Plant.

4. Initial Master Plan projects constructed will be in the Pond Creek Phase II area (Prairie Village and Fairdale), followed by Okolona Expansion and then North County Phase I. Construction of Pond Creek Phase III (Okolona Plant to Old Shepherdsville Road) will be completed during fiscal year 1993-94. North County Phase II construction follows Pond Creek Phase III.

5. The North County Wastewater Treatment Plant will be a 6 mgd plant, with start-up beginning in September 1990.

6. Proceeds of revenue bond sales will be available on July 1 of the fiscal year indicated. Rate increases will also take effect on July 1 of the appropriate year.

7. Construction and engineering costs increase at a compounded annual inflation rate of 8.3 percent. Power costs increase at a compounded annual inflation rate of 13.15 percent.

4 1.4 Scenario 4 Assumptions - EIS Alternative 9

1. MSD is fully committed to the Corrective Action Plan at the Morris Forman Treatment Plant except that construction of the so-called Sidestream Plant

(completion scheduled for March 1985) is contingent upon EPA funding.

2. The West County Wastewater Treatment Plant will be constructed by a traditional single prime contractor-type of contract, with start-up beginning in April 1988. It will be a 45 mgd plant.

3. Connection of the Okolona system and construction of the Northern Ditch Diversion Structure will be scheduled for completion to coincide with start-up of the West County Plant.

4. Initial Master Plan projects constructed will be in the Pond Creek Phase II area (Prairie Village and Fairdale), followed by Okolona Expansion and then North County Phase I. Construction of Pond Creek Phase III (Okolona Plant to Old Shepherdsville Road) will be completed during fiscal year 1993-94. North County Phase II construction follows Pond Creek Phase III.

5. The North County Wastewater Treatment Plant will be a 6 mgd plant, with start-up beginning in September 1990.

6. Proceeds of revenue bond sales will be available on July 1 of the fiscal year indicated. Rate increases will also take effect on July 1 of the appropriate year.

7. Construction and engineering costs increase at a compounded annual inflation rate of 8.3 percent. Power costs increase at a compounded annual inflation rate of 13.15 percent.

4.1.5 Scenario 5 Assumptions - EIS Alternative 7b

1. MSD is fully committed to the Corrective Action Plan at the Morris Forman Treatment Plant except that construction of the so-called Sidestream Plant (completion scheduled for March 1985) is contingent upon EPA funding.

2. The West County Wastewater Treatment Plant will be constructed by a traditional single prime contractor-type of contract, with start-up beginning in April 1988. It will be a 45 mgd plant.

3. Connection of the Okolona system, construction of the Northern Ditch Diversion Structure and construction of the Dixie Highway Interceptors will be scheduled for completion to coincide with start-up of the West County Plant.

4. Initial Master Plan projects constructed will be in the Pond Creek Phase II area (Prairie Village and Fairdale) and those interceptors influent to the Dixie Highway Interceptors, followed by Okolona Expansion and then North County Phase I. Construction of Pond Creek Phase III (Okolona Plant to Old Shepherdsville Road) will be completed during fiscal year 1993-94. North County Phase II construction follows Pond Creek Phase III.

5. No customer growth will occur in the West County EIS area after construction of the Dixie Highway Interceptors.

6. The North County Wastewater Treatment Plant will be a 6 mgd plant, with start-up beginning in September 1990.

7. Proceeds of revenue bond sales will be available on July 1 of the fiscal year indicated. Rate increases will also take effect on July 1 of the appropriate year.

8. Construction and engineering costs increase at a compounded annual inflation rate of 8.3 percent. Power costs increase at a compounded annual inflation rate of 13.15 percent.

4.1.6 Scenario 6 Assumptions - EIS Alternatives 7c

1. MSD is fully committed to the Corrective Action Plan at the Morris Forman Treatment Plant except that construction of the so-called Sidestream Plant (completion scheduled for March 1985) is contingent upon EPA funding.
2. The West County Wastewater Treatment Plant will be constructed by a traditional single prime contractor-type of contract, with start-up beginning in April 1988. It will be a 45 mgd plant.
3. Connection of the Okolona system, construction of the Northern Ditch Diversion Structure and construction of the Dixie Highway Interceptors will be scheduled for completion to coincide with start-up of the West County Plant.
4. Initial Master Plan projects constructed will be in the Pond Creek Phase II area (Prairie Village and Fairdale) and those interceptors influent to the Dixie Highway Interceptors, followed by Okolona Expansion and then North County Phase I. Construction of Pond Creek Phase III (Okolona Plant to Old Shepherdsville Road) will be completed during fiscal year 1993-94. North County Phase II construction follows Pond Creek Phase III.
5. Customer growth in the West County EIS area, after construction of the Dixie Highway Interceptors, will be at the rate of 2,000 customers per year. Ten percent of this growth will be direct connections to the Dixie Highway Interceptors. The remaining growth will become MSD customers through lateral extensions.
6. The North County Wastewater Treatment Plant will be a 6 mgd plant, with start-up beginning in September 1990.
7. Proceeds of revenue bond sales will be available on July 1 of the fiscal year indicated. Rate increases will also take effect on July 1 of the appropriate year.
8. Construction and engineering costs increase at a compounded annual inflation rate of 8.3 percent. Power costs increase at a compounded annual inflation rate of 13.15 percent.

4.2 MSD Financial Policies and Revenue Sources

4.2.1 General Operating Fund

MSD maintains a special revenue fund identified as the General Operating Fund. This fund receives user charges for sewerage service rendered to MSD customers. Disbursements from this fund are authorized to pay operation and maintenance expenses; provide for the retirement and interest payments of outstanding revenue bonds according to bond indenture agreements; provide for the repayment of grants to the Kentucky Pollution Abatement Authority pursuant to assistance agreements between MSD and KPAA; and contribute to normal capital requirements, which are those costs for interim replacements, betterments, and minor additions to collection, treatment, or other facilities.

MSD is not required by law to operate its general activities in accordance with a formal budget. However, it is required by its bond indenture agreements to budget revenues and expenses and to avoid exceeding its budgeted expenses.

4.2.2 1971 Construction Fund

A Construction Fund was created by the MSD Board in 1971 to receive net proceeds from the sale of sewer revenue bonds. Grants from Federal and State agencies for capital projects financed by the Construction Fund are deposited in the fund. Expenditures from the fund are limited to designated construction projects of sanitary sewer and treatment facilities within the area served by MSD in 1971.

4.2.3 Master Plan Fund

In 1974, MSD and the Fiscal Court of Jefferson County entered into an agreement with respect to financing public sewerage systems in Jefferson County outside the existing MSD service area. The MSD Board created the Master Plan Fund to record all financial transactions related to the designated expansion projects. In 1977, the Kentucky Capital Projects Corporation, a financing agency of Jefferson County, issued public project revenue bonds for the specific financing of the construction of the West County wastewater treatment plant, pumping stations, and certain segments of the Pond Creek and Mill Creek interceptor sewers.

4.2.4 Revenue Bonds

MSD finances capital expenditures through borrowed capital, except to the extent that minor additions and improvements may be financed out of revenues. Inasmuch as MSD is not empowered to levy ad valorem general property taxes, it raises capital funds from the sale of revenue bonds. A revenue bond is one payable from the user charges for the services provided. There is no further backing of a revenue bond issue other than the obligation that the borrower operate the utility system to provide sufficient net revenue to meet the obligation of the bond issue.

The successful use of revenue bond issues depends on the bond market evaluation of the dependability of the revenues pledged. There are no guarantees such as mortgages, liens, or full faith and credit provisions, which can be resorted to in case of default. MSD has no legal limitations on the amount of revenue bonds that may be issued, but excessive offerings represent high investment risks and are unattractive to bond buyers. In rating revenue bonds, buyers look particularly at such things as the economic justification for the project, reputation of the borrower, methods of billing and collecting, rate structures, provision for rate increases as needed to meet debt service requirements, policy of the borrower as to financial management, adequacy of reserve funds provided for in bond proceedings, supporting covenants to protect project revenues, and the degree to which forecasts of net revenues are considered to be sound and conservative.

MSD has no legal debt limit. In that regard, it has the ability to incur new debt. Although MSD is restricted from issuing any bonds ranking on a parity basis with the bonds it issued from 1954 through 1965, the agency may issue parity bonds ranking on a basis of equality with the bonds issued in 1971, if the net revenues for 12 consecutive months of the 15 prior months are equal to at least 1.1 times the maximum requirement for principal and interest payments in any future calendar year of the original bonds and new bonds then to be issued. The requirement that net revenues be somewhat higher than is actually necessary for debt service is termed coverage. This margin is intended to provide a protection against unforeseen costs or lack of anticipated revenue development.

MSD currently has outstanding revenue bonds in the amount of $48 million. Approximately 48 percent of the outstanding bonds is associated with the last issue in 1971. MSD is obligated to pay annual debt service charges for the revenue bonds in excess of $3.750 million. In addition to its debt service, MSD is contractually committed to pay its share of the Kentucky Pollution Abatement Authority bonds annual debt service which is in excess of $1.375 million; and by authorization of the MSD Board to pay a portion of the annual debt service on outstanding City of Louisville Series A, 1956 bonds, which is approximately $200,000. The total of all the above debt service charges is in excess of $5 million and represents approximately 20 percent of MSD's wastewater service charges.

4.2.5 General Obligation Bonds

General obligation bonds are secured by the full faith and credit of the bond issues. Such bonds are normally repaid from ad valorem general property taxes. In certain instances, repayment of the bonds is from user charge revenue provided the issuer secures the bonds with its taxing power.

MSD cannot legally issue general obligation bonds, but such bond issues are available to the City of Louisville and Jefferson County. The voting citizenry of local units of government or political subdivisions have the right to approve or reject bond referendums.

The issuance of general obligation bonds by local units of government is subject to constitutional or statutory limitations. Usually the total amount of general obligation bonding is limited to a stated percentage of the total assessed valuation of taxable property.

4.2.6 Connection Charges

Another source of revenues which MSD uses to finance sewer system expansion is connection fees. The connection fees are a one-time initial charge at the time users make connections to the collecting network. That is, the connection fees are applicable to property which had not been previously assessed or otherwise charged for the cost of a sewer.

If the recorded assessment cost exceeds the applicable connection fee, MSD charges the amount of assessment in lieu of the connection fee. The fees are escalated according to the size of the water meter serving the property.

4.2.7 Apportionment Warrants

Pursuant to Section 76.172 of the Kentucky Revised Statutes, MSD is empowered to finance costs of sewerage facilities by equitable assessments against benefited property owners. Where the construction of sewers is funded by assessment of costs against benefited properties, each unit is responsible for its proportionate share of the entire assessable cost of the sewers installed to serve the benefited area. When a unit is connected for sewer service, it is also assessed for its proportionate share of the entire assessable cost of all property service connections. MSD's assessment policy protects property owners against excessive costs incident to sewer construction and permits owners of benefited properties to be informed in advance, insofar as possible of the maximum costs proposed to be assessed against their properties.

Apportionment warrants constitute a lien against the land, inasmuch as the assessment against benefited property is determined according to the number of square feet in any lot or tract. Local financial institutions purchase the warrants issued by MSD. By virtue of the power vested in MSD, it publicly solicits bids for the purchase of the warrants. Interested financial institutions bid competitively on the interest rates only; the warrants are purchased at face value. Competitive bidding tends to lower the interest rate which is in the best interest of the property owners who arrange installment payments with the financial institution. Liens are eventually released when the property owner satisfies his obligation.

4.2.8 User Charges

MSD provides for financial support of its wastewater system and treatment facilities based on a user charge system. User charges are designed to recover the costs of serving the several classes of customers (residential, commercial, industrial), maintaining reasonable equity among the customer classes. The philosophy of MSD's user charge system is that the costs of service are distributed according to the use made of the system. Consequently, each customer class pays its responsible costs.

MSD complies with the EPA regulations which require that:

> "The user charge system must result in the distribution of the cost of operation and maintenance of treatment works within the grantee's jurisdiction to each user (or user class) in proportion to such user's contribution to the total wastewater loading of the treatment works. Factors, such as strength, volume, and delivery flow rate characteristics, shall be considered and included as the basis for the user's contribution to ensure a proportional distribution of operation and maintenance costs to each user (or user class)."

Although EPA limits its requirements to the cost of operation and maintenance, MSD concerns itself with all costs, including debt service and direct capital contributions.

4.3 MSD Cash Flow Model

The objective of a cash flow model is to project the cash flow for some future time period with a view toward predicting the stream of cash and cash balance that will be available at some future date. The cash flow model, as a financial management tool, has its primary usefulness as an aid in making decisions regarding capital budget and debt-paying ability. That is, the cash flow model can be thought of as a plan or a tool for forecasting the revenue required to support the level of debt necessary to finance capital improvements. Such forecasting makes it possible to determine external financing needs well in advance of their actual occurrence.

Cash flow (defined as changes in the cash balance or working capital) is useful in both cash forecasting and capital forecasting. Decisions having to do with selecting capital-investment projects, are greatly facilitated by a cash flow analysis. The concept of changes in working capital is useful for purposes of assessing long-term debt-paying ability. A good indication of the long-term debt-paying ability can be had by observing changes which are brought about by operations.

Cash forecasting, as a cash flow, is very similar to historical cash flow. Whereas historical cash flow is concerned with explaining historical changes in the cash balance, cash forecasting is concerned with predicting changes in the cash balance. To the extent that the past is useful in predicting the future, historical cash flows are the basis in preparing cash flow models.

Being faced with decisions on the level of investment and the means of financing, one must have some basis on which to decide among the various financing alternatives. Quantitative data play an important role in these decisions. Quantitative measurements are often difficult to make, primarily because of the uncertainty inherent in any financial prediction. Perfect synchronization between estimated cash realization from operations and estimated disbursements of cash in the discharge of obligations is virtually impossible. Cash may be realized more rapidly than needed to discharge obligations, resulting in an excess of cash, or cash realization may not be adequate and temporary borrowing may be required in order to discharge obligations.

The term "cash flow" is used in many different contexts. Cash flow is used in this instance to describe cash budgeting. This tool is useful, if not crucial, in making financial decisions with respect to capital projects. The MSD model presents a "flow of funds" through the year 1995. The model is similar to a statement of sources and uses of funds or a statement of "working capital flow." However, funds are sometimes thought of as being cash. Used in this sense, the concept of funds flow is the same as cash flow.

The two capital project funds used by MSD--the 1971 Construction Fund and the Master Plan Fund--comprise two subroutines within MSD's cash flow modeling program. Separate cash flow determinations were carried out for these funds, based on projected costs and schedules for capital improvement projects. The general MSD operating procedure for these funds is to maintain a year-end balance of at least $250,000 in each fund. If capital improvement expenditures during a year would deplete the fund cash reserve below $250,000, a bond issue sufficient to maintain the reserve would be projected.

A third subroutine involved in the MSD program projects cash flows for the General Operating Fund, based on revenue demands from the capital improvement funds, predicted system operating expenses, and predicted revenue recoveries. The primary output from the cash flow modeling program was the predicted service charge: the annual cost to an "average" residential customer. The service charge was adjusted to fulfill two possible requirements related to year-end funds and debt service coverage. MSD's general policy regarding funds available at the end of the year is to maintain that balance at $3.5 million. This cash on hand has been depleted as a result of the February 1981 sewer explosion, and MSD has set a schedule for replenishment as follows: $1.0 million at the end of 1982 and 1983, $1.83 million at the end of 1984, $2.67 million at the end of 1985, and $3.5 million at the end of 1986. If the cash flow prediction showed less than the scheduled amount of cash available at the end of a year, the service charge for that year was increased to meet the shortfall.

Indenture agreements for MSD's outstanding revenue bonds require that debt service coverage (net revenue minus MSD non-revenue debt service, divided by MSD revenue debt service) be maintained at 1.1 or above. If cash flow modeling showed such coverage falling below 1.1 for any year, the service charge was increased to maintain minimum coverage.

5. RESULTS AND DISCUSSION

5.1 Cash Flow Model Input

Input to the capital project funds is cost and timetable for construction projects. The calendars of capital projects for Scenarios 1 through 6 are illustrated in Figures 3 through 7. Costs for planning, design, and construction of each capital project were estimated by MSD and Gannett Fleming Corddry and Carpenter, Inc. in 1981 dollars. Costs for future capital improvement activities were inflated at the rates of 13.15 percent for power costs and 8.3 percent for all other costs. Inflated costs attributable to Mill Creek area capital projects are provided on Table 2 for each year of the planning period.

5.2 Cash Flow Model Output

The cash flow model outputs for Scenarios 1 through 6 are presented in Appendix A-1 to this report. A user's guide to the model, provided by MSD, is presented in Appendix A-2.

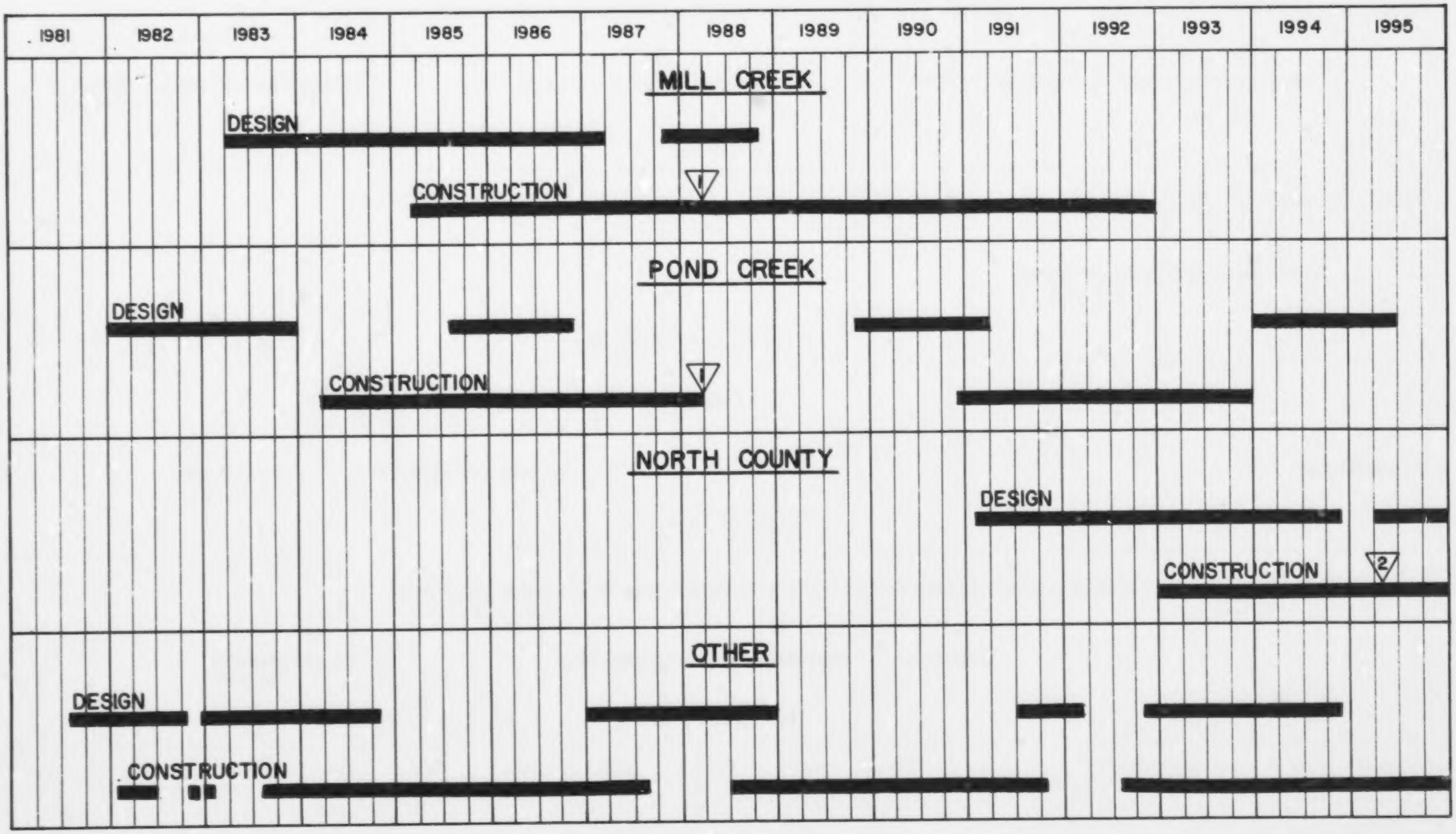
5.2.1 Annual Service Charges

The annual charges to an MSD equivalent residential unit (ERU) for each of the six scenarios are presented on Table 3. In general, the particular arrangement of projects within an expansion program appears to have little or no discernible impact on service charge, as evidenced by the similarities of Runs 1 and 2. These two runs pertain to a regional system in the West County-Pond Creek area, with Mill Creek facilities being constructed at different times. A second general observation regarding the cash flow runs is that developing public sewerage facilities of several scopes in Mill Creek does not have appreciable impact on MSD system service charges. Scenarios 1 and 2 include a complete regional public sewerage system in the Mill Creek area, (Alternative 6) while Scenarios 5 and 6 include public sewers at a smaller scale (Alternatives 7b and 7c), and Scenarios 3 and 4 involve no public sewers in the Mill Creek area at all (Alternative 9). Despite the broad difference in Mill Creek activities among these scenarios, the annual MSD service charge for the various situations are virtually the same. These findings reflect the damping effect of a large customer base on the overall cost impact of potential activities in one particular service area.

Annual service charges allocable to Mill Creek MSD customers under Scenarios 1, 5, and 6 are shown on Table 4. Annual costs are projected from 1988 onward, since the West County treatment plant is projected to be on line during that year. The large service charge in 1988 reflects a relatively small customer base for the first year of plant operation. Comparison of Tables 3 and 4 reveals a fairly large disparity between costs allocable to potential Mill Creek customers and MSD service charge. The difference results from MSD's policy to maintain uniform user charges throughout the system. Thus, new MSD customers participate in supporting such costs as stormwater treatment and small treatment plant operation.

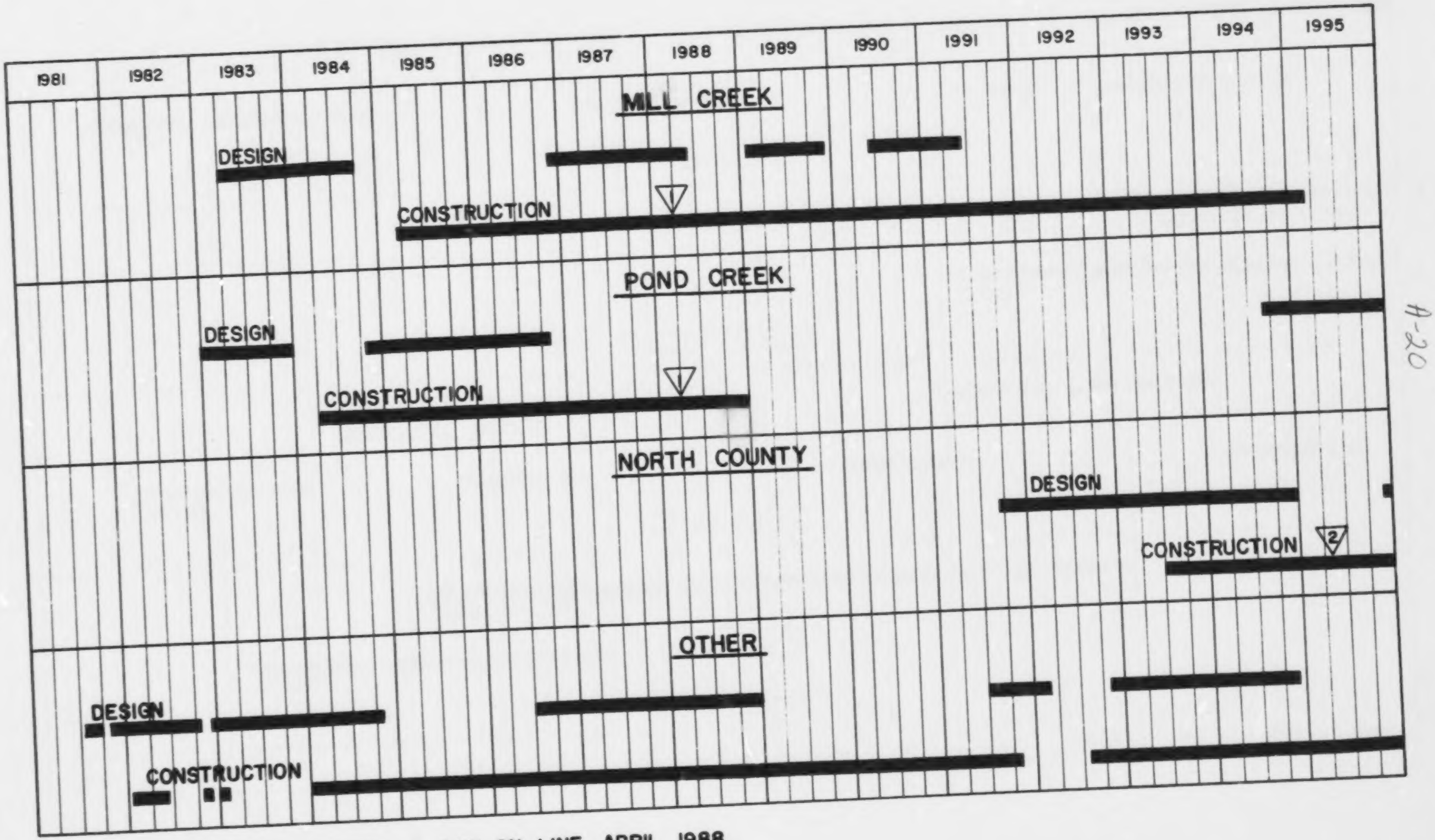
Comparison of annual service charges for Scenarios 1, 5, and 6, shown on Table 4,appears to illustrate slightly less service charge increases from 1990 to 1995 for Scenarios 1 and 6 compared to Scenario 5. The difference between Scenarios 5 and 6 is projected because of the increasing customer base through the planning period in Scenario 6 (Alternative 7c) as future developments are connected to the public

FIGURE 3 MSD'S SCHEDULE OF ACTIVITIES FOR SCENARIO I.



▽1 WEST COUNTY TREATMENT PLANT ON LINE APRIL 1988.
▽2 NORTH COUNTY TREATMENT PLANT ON LINE OCTOBER 1995.

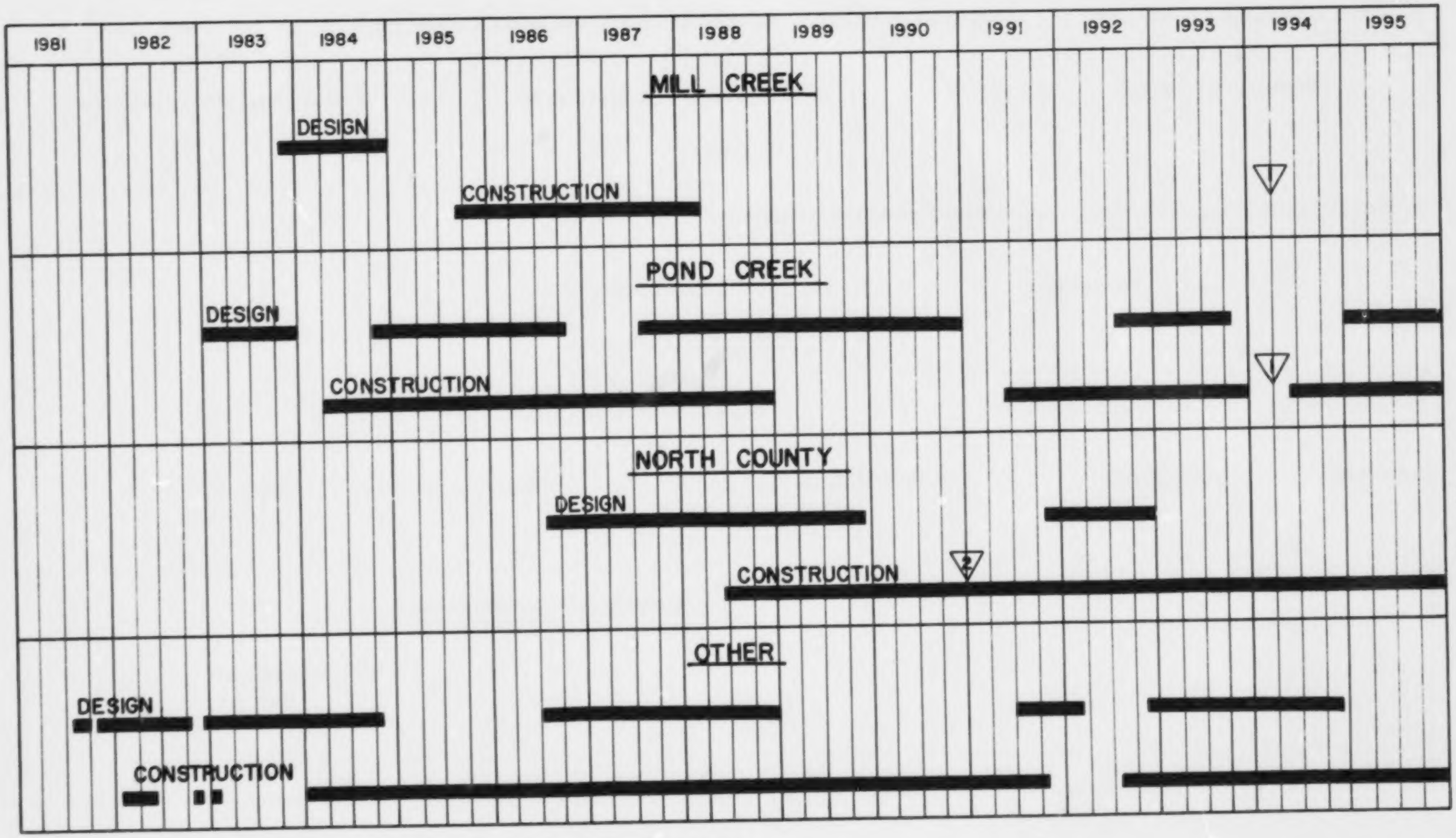
FIGURE 4 MSD'S SCHEDULE OF ACTIVITIES FOR SCENARIO 2



1 WEST COUNTY TREATMENT PLANT ON LINE APRIL 1988.

2 NORTH COUNTY TREATMENT PLANT ON LINE OCTOBER 1995.

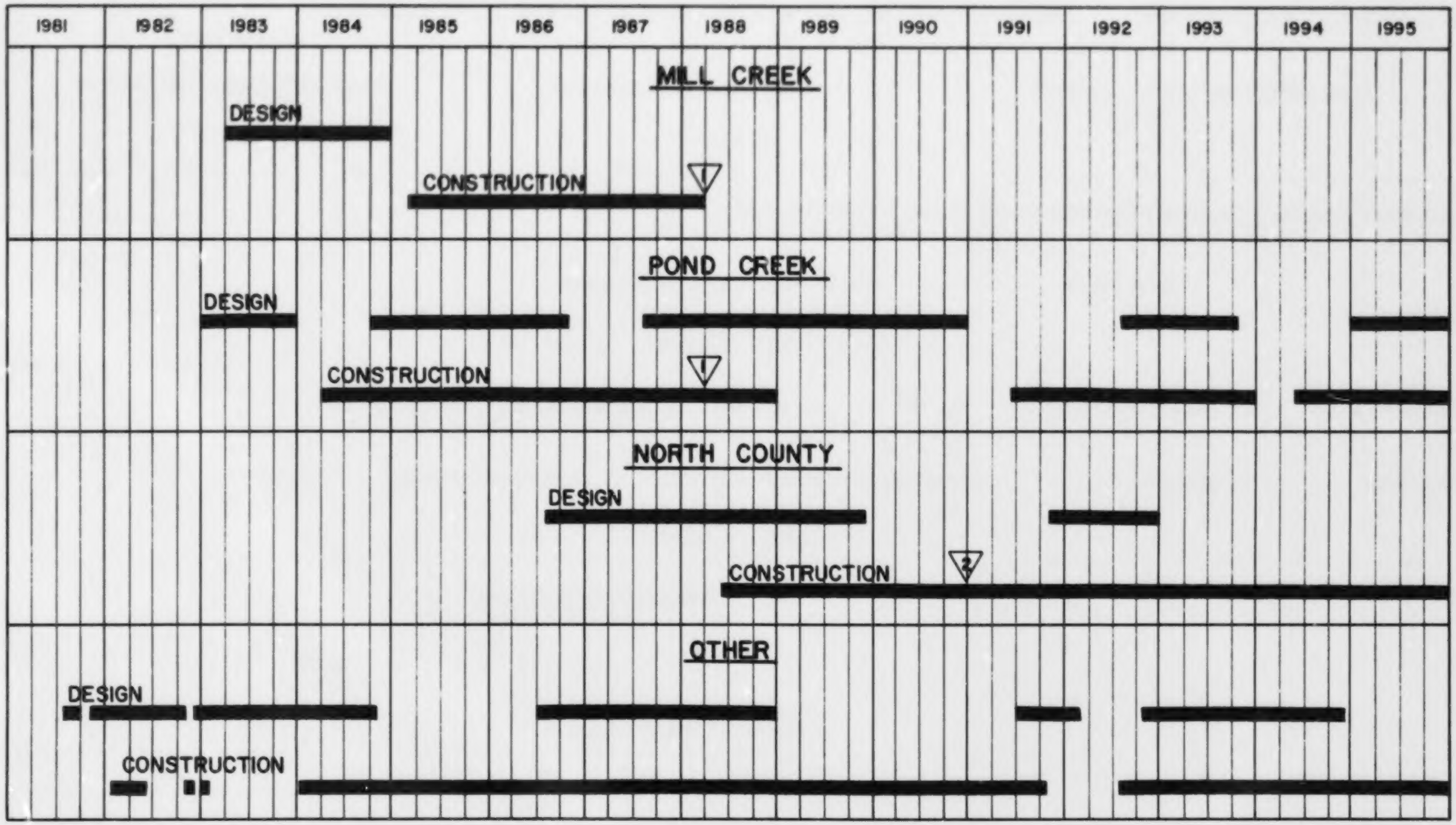
FIGURE 5 MSD'S SCHEDULE OF ACTIVITIES FOR SCENARIO 3



1 WEST COUNTY TREATMENT PLANT ON LINE APRIL 1994.

2 NORTH COUNTY TREATMENT PLANT ON LINE SEPTEMBER 1990.

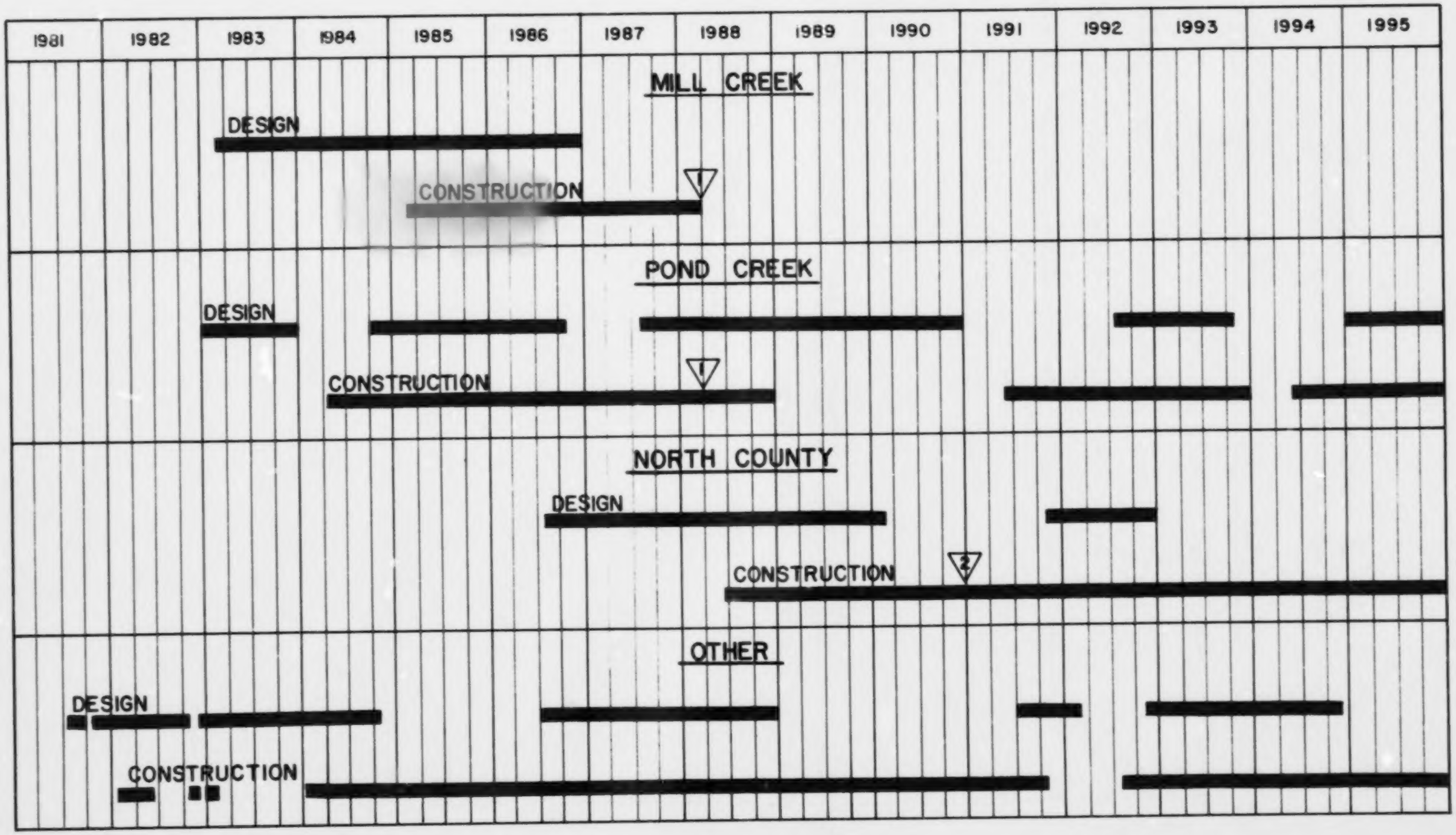
FIGURE 6 MSD'S SCHEDULE OF ACTIVITIES FOR SCENARIO 4



▽1 WEST COUNTY TREATMENT PLANT ON LINE APRIL 1988.

▽2 NORTH COUNTY TREATMENT PLANT ON LINE SEPTEMBER 1990.

FIGURE 7 MSD'S SCHEDULE OF ACTIVITIES FOR SCENARIO 5&6



▽1 WEST COUNTY TREATMENT PLANT ON LINE APRIL 1988.

▽2 NORTH COUNTY TREATMENT .PLANT ON LINE SEPTEMBER 1990.

TABLE 2. INFLATED COSTS ATTRIBUTABLE TO MILL CREEK AREA CAPITAL PROJECTS ($1,000)

Scenario	1982	1983	1984	1985	1986	1987	1988	1989
1	458	147	1,191	4,361	17,376	24,594	27,083	18,479
2	458	151	1,161	3,685	11,160	11,446	12,172	11,970
5	232	55	464	1,952	6,346	11,372	9,329	40
6	233	133	1,050	3,767	12,007	17,560	14,171	112

Scenario	1990	1991	1992	1993	1994	1995	1996
1	20,916	19,164	10,291	1,921			
2	19,650	22,288	23,367	26,278	19,229	7,507	557
5							
6							

TABLE 3. MSD SERVICE CHARGES FOR
SCENARIOS 1 THROUGH 6

	Annual Service Charge (Dollars)							
Scenario	1982	1983	1984	1985	1986	1987	1988	1989
1	94	106	116	127	139	160	182	203
2	94	107	116	126	140	155	180	199
3	94	107	116	126	140	151	175	192
4	94	107	116	126	141	156	181	199
5	94	107	116	126	142	160	183	199
6	94	107	116	126	142	160	184	198

	Annual Service Charge (Dollars)					
Scenario	1990	1991	1992	1993	1994	1995
1	214	229	240	256	271	301
2	213	234	244	264	279	299
3	209	225	254	264	286	310
4	215	232	255	270	288	310
5	213	229	250	262	281	303
6	211	226	245	257	273	294

TABLE 4. ANNUAL SERVICE CHARGE FOR MILL CREEK MSD CUSTOMERS

Scenario	Annual Service Charge (Dollars)	
	1988	1989
1	359	162
5	474	164
6	479	162

Scenario	Annual Service Charge (Dollars)					
	1990	1991	1992	1993	1994	1995
1	168	172	178	182	189	211
5	172	180	191	202	207	214
6	167	173	181	190	193	198

sewerage system. No future customer growth is forecast for Scenario 5 (Alternative 7b). Generally, a relatively broad regional sewerage system appears to involve slightly lower user costs than a more limited system designed to fulfill only current needs.

User charges for several existing private residential treatment plants in the Mill Creek area are given on Table 5, along with projections to future years. Current user charges were obtained from MSD while user charges for future years were predicted by inflating the previous year user charge by 8.3 percent. These estimates are not intended to predict what the actual charges to users of the private sewerage systems will be, but they comprise a fairly reasonable picture of private system charges in the longer term. Actually, since total private system costs were inflated at 8.3 percent, while MSD power costs were inflated at 13.15 percent, the projections shown on Table 5 may be considered conservative figures for comparison with public wastewater management through MSD. As indicated by Tables 3 and 5, projected charges by MSD were consistently lower than private system projections.

5.2.2 Revenue Requirements

Revenue requirements for the six scenarios are illustrated on Table 6. Although bonding requirements vary somewhat among the scenarios, the total revenue needs do not differ markedly among the scenarios. It should be noted that through the planning period, each scenario involves essentially continuous construction activity at the level deemed reasonable by MSD. Thus, the impact on the MSD system of sewering or not sewering Mill Creek is imperceptible, despite the relatively large capital cost associated with such construction. Were the cash flow forecast to be extended to the end of all MSD expansion activities, the impact of activities in one particular area on service charge and revenue needs would become apparent. It should be noted, however, that forecasts extended into the next century involve extremely large uncertainty.

5.2.3 Future ERU Costs

User costs for future residential units constructed in the Mill Creek area were developed for the following wastewater management systems:

1. Septic tank and seepage pit,
2. Small area treatment, and
3. On-site aerobic unit.

Capital costs for the three types of systems were assumed to be included in the residence cost, and were therefore amortized for a 25 year period at 15 percent interest. Annualized capital costs for a new residential wastewater management system installed in each year of the planning period are provided on Table 7. Capital costs were inflated at 8.3 percent each year. The figure shown on Table 7 represents the annual mortgage payment for wastewater management facilities; it would remain constant through the life of the mortgage.

Annual O&M costs for the three wastewater systems noted above are presented on Table 8. Costs were inflated at 8.3 percent, and would continue to rise with inflation through the planning period.

The total annual costs for a Mill Creek ERU constructed in 1989 (the first full year after completion of the West County treatment plant) for four wastewater management systems are shown on Table 9. Public system costs were predicted by amortizing the 1989 projected cost for collector sewers for 10 years at 15 percent (10 years is generally the maximum payback period provided in sewer apportionment warrants) and adding this annualized cost to MSD service charges predicted by the cash flow model

TABLE 5. PROJECTED PRIVATE SEWERAGE SYSTEM ANNUAL SERVICE CHARGES
(PROJECTED AT ANNUAL INFLATION RATE OF 8.3%)

Sewerage System	Current Service Charge	Projected Service Charge (Dollars)							
		1982	1983	1984	1985	1986	1987	1988	1989
Valley Village	179	194	210	227	246	267	289	313	339
Havalock	158	171	185	201	217	235	255	276	299
Forest Hills	182	197	213	231	250	271	294	318	344
Fordhaven	202	219	237	257	278	301	326	353	382
West Springfield	162	175	190	206	223	241	261	283	307
Timothy Hills	240	260	281	305	330	358	387	419	454

Sewerage System	Projected Service Charge (Dollars)					
	1990	1991	1992	1993	1994	1995
Valley Village	367	397	430	466	505	547
Havalock	324	351	380	411	445	482
Forest Hills	373	404	438	474	513	556
Fordhaven	414	448	486	526	570	617
West Springfield	332	360	389	422	457	495
Timothy Hills	492	533	577	625	677	733

TABLE 6. MSD REVENUE BONDING REQUIREMENTS FOR SCENARIOS 1 THROUGH 6

Scenario	Total Revenue Bonding (Thousands of Dollars) 1982	1983	1984	1985	1986	1987	1988	1989
1	0	0	0	500	5,820	22,550	19,615	8,250
2	0	0	0	1,410	4,740	17,235	20,725	3,425
3	0	0	0	1,410	4,740	6,475	20,200	4,465
4	0	0	0	1,410	4,740	18,825	21,850	4,465
5	0	0	0	1,410	5,580	25,230	20,935	4,465
6	0	0	0	1,410	5,810	25,585	20,890	4,465

Scenario	Total Revenue Bonding (Thousands of Dollars) 1990	1991	1992	1993	1994	1995
1	9,510	2,880	0	0	0	14,155
2	9,225	9,545	3,360	6,660	3,265	6,920
3	10,465	5,685	25,765	0	5,405	9,155
4	8,095	4,815	15,340	6,585	0	9,155
5	7,480	1,635	9,690	0	0	9,155
6	7,480	1,635	9,690	0	0	9,155

TABLE 7. ANNUALIZED CAPITAL COST PER ERU FOR NON-PUBLIC WASTEWATER MANAGEMENT SYSTEM CONSTRUCTED IN EACH YEAR OF STUDY

	Annualized Cost (Dollars)								
Type of System	1981	1982	1983	1984	1985	1986	1987	1988	1989
Septic tank, seepage pit	302	327	354	384	415	450	487	528	572
Small area treatment									
treatment plant	435	471	510	553	598	648	702	760	823
sewers	560	606	657	711	770	834	904	979	1,060
On-site aerobic unit	385	417	452	489	530	574	621	673	729

	Annualized Cost (Dollars)					
Type of System	1990	1991	1992	1993	1994	1995
Septic tank, seepage pit	619	670	726	786	851	922
Small area treatment						
treatment plant	892	966	1,050	1,130	1,230	1,330
sewers	1,150	1,240	1,350	1,460	1,580	1,710
On-site aerobic unit	789	855	925	1,000	1,080	1,180

Notes: Amortization period - 25 years
Interest rate - 15%
Annual inflation rate - 8.3%

TABLE 8. ANNUAL OPERATION AND MAINTENANCE COST PER ERU FOR NON-PUBLIC WASTEWATER MANAGEMENT SYSTEMS

	Annual Cost (Dollars)								
Type of System	1981	1982	1983	1984	1985	1986	1987	1988	1989
Septic tank, seepage pit	43	47	50	55	59	64	69	75	81
Small area treatment									
treatment plant	113	122	132	144	155	168	182	197	214
sewers	32	35	38	41	44	48	52	56	61
On-site aerobic unit	270	292	317	343	371	402	436	472	511

	Annual Cost (Dollars)					
Type of System	1990	1991	1992	1993	1994	1995
Septic tank, seepage pit	88	95	103	112	121	131
Small area treatment						
treatment plant	232	251	272	294	319	345
sewers	66	71	77	83	90	98
On-site aerobic unit	553	599	649	703	761	824

Note: Annual inflation rate - 8.3%

TABLE 9. TOTAL ANNUAL COST FOR NEW MILL CREEK ERU CONSTRUCTED IN 1989

Type of System	Total Annual Cost (Dollars) 1989
Public (MSD)	1,570
Septic tank, seepage pit	653
Small area treatment	2,160
On-site aerobic unit	1,240

	Total Annual Cost (Dollars)					
Type of System	1990	1991	1992	1993	1994	1995
Public (MSD)	1,580	1,600	1,610	1,620	1,640	1,670
Septic tank, seepage pit	660	667	675	684	693	703
Small area treatment	2,160	2,200	2,230	2,260	2,290	2,330
On-site aerobic unit	1,240	1,330	1,380	1,430	1,490	1,550

(Scenario 1). According to this analysis, on-site systems will be substantially less expensive to new ERUs than sewers and centralized treatment. Also, regional wastewater management systems will be less costly to operate than small area systems.

APPENDIX A-1

MSD CASH FLOW MODEL PRINTOUT

SCENARIOS 1 THROUGH 6

GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/25/81
RUN #1 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
EQUIVALENT CUSTOMERS														
BASE	288298	288704	289751	290597	291041	291643	292048	295178	310174	314006	319938	325312	330393	335938
GROWTH	406	1047	846	444	602	405	3130	14996	3832	5932	5374	5081	5545	2129
TOTAL	288704	289751	290597	291041	291643	292048	295178	310174	314006	319938	325312	330393	335938	338067
SERVICE CHARGE ($/YR)	94	106	116	127	139	160	182	203	214	229	240	256	271	301
SERVICE CHARGE INCREASE/YR	0.0%	12.8%	9.4%	9.5%	9.4%	15.1%	13.7%	11.5%	5.4%	7.0%	4.8%	6.7%	5.9%	11.1%
REVENUE														
BASE SERVICE CHARGE	27100	30603	33611	36906	40455	46663	53153	59921	66377	71907	76785	83280	89537	101117
GROWTH SERVICE CHARGE	38	111	98	56	84	65	570	3044	820	1358	1290	1301	1503	641
SUBTOTAL	27138	30714	33709	36962	40539	46728	53723	62965	67197	73265	78075	84581	91040	101758
INVESTMENT INCOME	580	620	683	806	931	1045	1166	1315	1430	1515	1613	1720	1837	1982
OTHER INCOME	622	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1202	620	683	806	931	1045	1166	1315	1430	1515	1613	1720	1837	1982
TOTAL REVENUE	28340	31334	34392	37768	41470	47773	54889	64280	68627	74780	79688	86301	92877	103740
RECOVERIES														
FEDERAL GRANT PROJECTS														
MP GOF CONTRIBUTIONS	9	42	104	355	737	893	1021	179	360	571	756	706	923	1180
1971 CF CONTRIBUTIONS	4	87	68	85	41	0	0	0	0	0	18	107	90	90
TOTAL	13	129	172	440	778	893	1021	179	360	571	774	813	1013	1270
FEDERAL RECOVERIES	10	97	129	330	584	670	766	134	270	428	581	610	760	953
GOF DIRECT RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	10	97	129	330	584	670	766	134	270	428	581	610	760	953
ASSESSMENT RECOVERIES														
ASSESSMENTS FOR MP	0	0	0	0	0	0	138	368	432	638	733	496	561	266
OTHER ASSESSMENTS	131	0	0	0	111	0	0	0	0	0	37	20	0	0
SUBTOTAL	131	0	0	0	111	0	138	368	432	638	770	516	561	266
OTHER RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	141	97	129	330	695	670	904	502	702	1066	1351	1126	1321	1219

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GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/25/81
RUN #1 (INFLATED)

FISCAL YEARS

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
OPERATING EXPENSES	22722	25542	27177	29954	33384	36415	40637	48844	53457	58659	64344	70550	77476	84743
CAPITAL CONTRIBUTIONS														
1971 CONST FUND PROJECTS	165	381	424	658	478	1176	1783	1918	1972	2212	1754	1544	1333	2160
MASTER PLAN FUND PROJECTS	9	42	104	370	780	911	1021	179	360	571	756	706	923	1180
TOTAL CAPITAL CONTRIBUTIONS	174	423	528	1028	1258	2087	2804	2097	2332	2783	2510	2250	2256	3340
DEBT SERVICE														
1971 CONST FUND BONDS(OLD)	3783	3771	3771	3762	3759	3763	3757	3756	3761	3760	3759	3763	3761	3763
1971 CONST FUND BONDS(NEW)	0	0	0	55	693	1610	2628	3532	4574	4889	4889	4889	4889	5363
MASTER PLAN BONDS(NEW)	0	0	0	0	0	1553	2684	2684	2684	2684	2684	2684	2684	3761
SUBTOTAL	3783	3771	3771	3817	4452	6926	9069	9972	11019	11333	11332	11336	11334	12887
KPAA LOAN	1337	1337	1378	1378	1378	1378	1379	1379	1379	1380	1380	1380	1381	1381
CITY BONDS	202	199	195	191	187	183	179	176	172	168	164	160	156	152
OKOLONA BONDS	0	0	0	0	0	0	24	143	143	143	143	143	143	143
SUBTOTAL	1539	1536	1573	1569	1565	1561	1582	1698	1694	1691	1687	1683	1680	1676
TOTAL DEBT SERVICE	5322	5307	5344	5386	6017	8487	10651	11670	12713	13024	13019	13019	13014	14563
INCOME + OR - EXPENSES	263	158	1472	1730	1506	1454	1701	2171	827	1380	1166	1608	1452	2313
FUND BALANCE - BEG OF YEAR	7723	7986	8144	9617	11346	12852	14307	16007	18179	19006	20386	21552	23159	24611
FUND BALANCE - END OF YEAR	7986	8144	9617	11346	12852	14307	16007	18179	19006	20386	21552	23159	24611	26924
LESS WORKING CAPITAL	6242	7064	7753	8501	9324	10747	12356	14482	15455	16851	17957	19454	20939	23404
FUNDS AVAILABLE END OF YEAR	1744	1080	1864	2845	3528	3560	3651	3697	3551	3535	3595	3705	3672	3520

MSD DEBT SERVICE COVERAGE CALCULATIONS

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
GROSS REVENUE	28340	31334	34392	37768	41470	47773	54889	64280	68627	74780	79688	86301	92877	103740
OPERATING EXPENSES	22722	25542	27177	29954	33384	36415	40637	48844	53457	58659	64344	70550	77476	84743
NET REVENUE	5618	5791	7215	7814	8086	11358	14252	15436	15170	16121	15344	15751	15401	18997
PLUS DEPRECIATION	342	370	401	435	471	510	552	598	647	701	759	822	891	965
NET REV + DEPR (A)	5960	6161	7616	8249	8557	11868	14804	16034	15817	16822	16103	16573	16292	19962
TOTAL MSD DEBT SERVICE	5322	5307	5344	5386	6017	8487	10651	11670	12713	13024	13019	13019	13014	14563
TOTAL DEBT SERVICE COVERAGE	1.12	1.16	1.43	1.53	1.42	1.40	1.39	1.37	1.24	1.29	1.24	1.27	1.25	1.37
(A) LESS NON-REV DEBT SVC	4421	4625	6043	6680	6992	10307	13222	14336	14123	15131	14416	14890	14612	18286
MSD REVENUE DEBT SERVICE	3783	3771	3771	3817	4452	6926	9069	9972	11019	11333	11332	11336	11334	12887
MSD DEBT SERVICE COVERAGE	1.17	1.23	1.60	1.75	1.57	1.49	1.46	1.44	1.28	1.34	1.27	1.31	1.29	1.42

1971 CONSTRUCTION FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/23/81
RUN #1 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	500	5820	8370	9290	8250	9510	2880	0	0	0	4325
INCOME														
BOND PROCEEDS	0	0	0	439	5122	7466	8178	7361	8372	2534	0	0	0	3805
INVESTMENT INCOME	1037	846	616	326	267	266	265	230	267	0	169	378	314	254
CONNECTION FEES	53	41	35	38	41	45	48	52	57	939	229	72	78	85
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1090	887	651	803	5430	7777	8491	7643	8696	3473	398	450	392	4144
RECOVERIES														
FEDERAL GRANTS	1647	1839	6209	6079	540	0	0	0	0	0	29	92	274	1957
GENERAL OPERATING FUND	165	381	424	658	478	1176	1783	1918	1972	2212	1754	1544	1333	2160
ASSESSMENTS FOR MP	0	0	0	0	0	0	3779	10399	11969	17694	20249	14002	13487	12946
OTHER ASSESSMENTS	1174	0	0	0	1136	0	0	0	0	0	376	278	0	0
OTHER	113	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	3099	2220	6633	6737	2154	1176	5562	12317	13941	19906	22408	15916	15094	17063
EXPENSES														
NEW CONSTRUCTION	5980	6181	10161	12393	9128	9089	14054	19895	22700	23346	17027	17075	16643	24577
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	5980	6181	10161	12393	9128	9089	14054	19895	22700	23346	17027	17075	16643	24577
NET INCOME + (-) EXPENSES	-1791	-3074	-2877	-4853	-1544	-136	-1	65	-63	33	5779	-709	-1157	-3370
FUND BALANCE BEG OF YEAR	14541	12750	9676	6799	1946	402	266	265	330	267	300	6079	5370	4213
FUND BALANCE END OF YEAR	12750	9676	6799	1946	402	266	265	330	267	300	6079	5370	4213	843
LESS WORKING CAPITAL	412	460	1552	1520	135	0	0	0	0	0	7	23	69	489
FUNDS AVAILABLE END OF YEAR	12338	9216	5247	426	267	266	265	330	267	300	6072	5347	4144	354

MASTER PLAN FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/23/81
RUN #1 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	0	0	14180	10325	0	0	0	0	0	0	9830
INCOME														
BOND PROCEEDS	0	0	0	0	0	12482	9089	0	0	0	0	0	0	8651
INVESTMENT INCOME	1603	1709	1790	1722	1193	1240	1046	694	921	938	927	795	433	772
CONNECTION FEES	0	0	0	0	0	0	387	2993	639	1240	1261	925	3684	761
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1603	1709	1790	1722	1193	13722	10522	3687	1560	2178	2188	1720	4117	10184
RECOVERIES														
FEDERAL GRANTS	186	433	3508	11332	36755	40400	35178	2402	2184	4311	7998	14426	20812	27091
GENERAL OPERATING FUND	9	42	104	370	780	911	1021	179	360	571	756	706	923	1180
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	195	475	3612	11702	37535	41311	36199	2581	2544	4882	8754	15132	21735	28271
EXPENSES														
NEW CONSTRUCTION	590	619	4780	15552	49953	54919	47997	3296	3340	6570	11530	20064	29091	37699
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	590	619	4780	15552	49953	54919	47997	3296	3340	6570	11530	20064	29091	37699
NET INCOME + (-) EXPENSES	1208	1565	622	-2128	-11225	114	-1276	2972	764	490	-588	-3212	-3239	756
FUND BALANCE BEG OF YEAR	20242	21450	23015	23637	21509	10284	10398	9122	12094	12858	13348	12760	9548	6309
FUND BALANCE END OF YEAR	21450	23015	23637	21509	10284	10398	9122	12094	12858	13348	12760	9548	6309	7065
LESS WORKING CAPITAL	47	108	877	2833	9189	10100	8795	601	546	1078	2000	3607	5203	6773
FUNDS AVAILABLE END OF YEAR	21403	22907	22760	18676	1095	298	327	11493	12312	12270	10760	5941	1106	292

GENERAL OPERATING FUND
ESTIMATE OF EXPENDITURES
(COSTS IN $1,000'S)
07/25/81
SCENARIO RUN 1
INFLATION RATES: PWR=13.15% OTH= 8.30%

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ADMIN, O&M COST BASE	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1
ONE TIME EXPENSE (1)	471.0	800.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POWER COST BASE	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7
MF SIDESTREAM TP (2)														
POWER	0.0	0.0	0.0	50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
OTHER	0.0	0.0	0.0	200.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0
MORRIS FORMAN OTHER RCAP	0.0	488.7	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5
DROP IN MFWTP POWER $(3)	0.0	0.0	0.0	0.0	0.0	0.0	-71.7	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5
ADD SEWER MAINT: NEW (4)	4.2	5.6	7.5	11.1	16.8	20.2	31.8	95.0	130.4	174.7	219.0	254.0	299.2	315.2
ADD SEWER MAINT: ACQ (5)	0.0	16.0	27.6	27.6	27.6	27.6	60.4	215.2	215.2	228.5	234.8	238.2	262.0	268.3
CUST SERV: NEW CUST (6)	4.5	16.0	25.3	30.2	36.8	41.3	75.7	240.6	282.8	348.0	407.2	463.0	524.0	547.5
WEST CO PUMP STATION (7)														
POWER	107.8	107.8	107.8	107.8	107.8	107.8	89.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	136.3	136.3	136.3	136.3	136.3	136.3	113.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WEST COUNTY WTP (8)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	83.0	483.7	509.0	546.9	583.0	617.3	653.4	667.9
POWER	0.0	0.0	0.0	0.0	0.0	0.0	56.6	269.5	283.6	304.8	324.9	344.0	364.1	372.1
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	468.6	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0
NORTHERN DITCH PS (9)														
POWER	27.8	27.8	27.8	27.8	27.8	27.8	24.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0
OTHER	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
OKOLONA LIFT STA - 7(10)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	8.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
VILLA ANA WTP (11)														
POWER	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	46.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH COUNTY WTP (12)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GOOSE CREEK PS (13)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS UNINFLATED POWER	2980.8	2971.3	2971.3	3021.3	3121.3	3121.3	3085.4	2835.9	2850.0	2871.2	2891.3	2910.4	2930.5	2938.5
OTHER	19741.4	20541.9	19927.5	20136.0	20548.3	20556.2	21172.7	24098.1	24201.0	24361.7	24507.6	24636.1	24802.2	24862.5
TOTALS	22722.2	23513.2	22898.8	23157.3	23669.6	23677.5	24258.1	26934.0	27051.0	27232.9	27398.9	27546.5	27732.7	27801.0
TOTALS INFLATED POWER	2980.8	3362.0	3804.1	4376.8	5116.3	5789.1	6475.0	6734.0	7657.4	8728.8	9945.8	11328.0	12906.1	14643.2
OTHER	19741.4	22180.5	23372.7	25577.5	28267.7	30625.6	34162.3	42109.7	45799.5	49930.2	54398.3	59222.3	64570.1	70099.5
TOTALS	22722.2	25542.5	27176.8	29954.3	33384.0	36414.7	40637.3	48843.7	53456.9	58659.0	64344.1	70550.3	77476.2	84742.7

NOTES

(1) NOT TO BE INFLATED
(2) OPERATION BEGINS ON 3/01/85
(3) BEGINS ON 4/28/88
(4) AT $1,200 PER MILE (1981)
(5) AT $2,000 PER MILE (1981)
(6) AT $11.00 PER NEW CUSTOMER (1981)
(7) COST INCLUDED IN WEST COUNTY WTP AFTER 4/28/88
(8) BEGINS ON 4/28/88 (45/63 MGD)
(9) OPERATION MODIFIED ON 4/28/88
(10) MSD ASSUMES OPERATION ON 4/28/88
(11) PLANT OUT OF SERVICE IN JULY, 1982
(12) BEGINS ON 7/15/95
(13) BEGINS ON 8/27/96

GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #2 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
EQUIVALENT CUSTOMERS														
BASE	288298	288704	289751	290597	291041	291643	292048	294692	308128	309955	315688	320237	324596	331060
GROWTH	406	1047	846	444	602	405	2644	13436	1827	5733	4549	4359	6464	5276
TOTAL	288704	289751	290597	291041	291643	292048	294692	308128	309955	315688	320237	324596	331060	336336
SERVICE CHARGE ($/YR)	94	107	116	126	140	155	180	199	213	234	244	264	279	299
SERVICE CHARGE INCREASE/YR	0.0%	13.8%	8.4%	8.6%	11.1%	10.7%	16.1%	10.6%	7.0%	9.9%	4.3%	8.2%	5.7%	7.2%
REVENUE														
BASE SERVICE CHARGE	27100	30891	33611	36615	40746	45205	52569	58644	65631	72529	77028	84543	90562	98987
GROWTH SERVICE CHARGE	38	112	98	56	84	63	476	2674	389	1342	1110	1151	1803	1578
SUBTOTAL	27138	31003	33709	36671	40830	45268	53045	61318	66020	73871	78138	85694	92365	100565
INVESTMENT INCOME	574	618	693	806	934	1048	1153	1295	1405	1515	1629	1735	1860	1982
OTHER INCOME	622	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1196	618	693	806	934	1048	1153	1295	1405	1515	1629	1735	1860	1982
TOTAL REVENUE	28334	31621	34402	37477	41764	46316	54198	62613	67425	75386	79767	87429	94225	102547
RECOVERIES														
FEDERAL GRANT PROJECTS														
MP GOF CONTRIBUTIONS	9	42	74	321	693	926	1200	460	422	445	402	456	721	1220
1971 CF CONTRIBUTIONS	4	87	68	85	41	0	0	0	0	0	18	107	90	90
TOTAL	13	129	142	406	734	926	1200	460	422	445	420	563	811	1310
FEDERAL RECOVERIES	10	97	107	305	551	695	900	345	317	334	315	422	608	983
GOF DIRECT RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	10	97	107	305	551	695	900	345	317	334	315	422	608	983
ASSESSMENT RECOVERIES														
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	379	179	376	606	548	734	859
OTHER ASSESSMENTS	131	0	0	0	111	0	0	0	0	0	37	20	0	0
SUBTOTAL	131	0	0	0	111	0	0	379	179	376	643	568	734	859
OTHER RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	141	97	107	305	662	695	900	724	496	710	958	990	1342	1842

PAGE 2
GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #2 (INFLATED)

FISCAL YEARS

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40622	48766	53271	58450	64056	70187	77131	84621
CAPITAL CONTRIBUTIONS														
1971 CONST FUND PROJECTS	165	384	403	598	379	744	1383	1481	1667	2534	2154	2170	2063	1877
MASTER PLAN FUND PROJECTS	9	42	74	336	736	944	1200	460	422	445	402	456	721	1220
TOTAL CAPITAL CONTRIBUTIONS	174	426	477	934	1115	1688	2583	1941	2089	2979	2556	2626	2784	3097
DEBT SERVICE														
1971 CONST FUND BONDS(OLD)	3783	3771	3771	3762	3759	3763	3757	3756	3761	3760	3759	3763	3761	3763
1971 CONST FUND BONDS(NEW)	0	0	0	154	673	1249	2175	2550	3561	4607	5005	5735	6093	6093
MASTER PLAN BONDS(NEW)	0	0	0	0	0	1312	2656	2656	2656	2656	2656	2656	2656	3414
SUBTOTAL	3783	3771	3771	3916	4432	6324	8588	8962	9978	11023	11420	12154	12510	13270
KPAA LOAN	1337	1337	1378	1378	1378	1378	1379	1379	1379	1380	1380	1380	1381	1381
CITY BONDS	202	199	195	191	187	183	179	176	172	168	164	160	156	152
OKOLONA BONDS	0	0	0	0	0	0	24	143	143	143	143	143	143	143
SUBTOTAL	1539	1536	1573	1569	1565	1561	1582	1698	1694	1691	1687	1683	1680	1676
TOTAL DEBT SERVICE	5322	5307	5344	5485	5997	7885	10170	10660	11672	12714	13107	13837	14190	14946
INCOME + OR - EXPENSES	94	442	1511	1409	1930	1023	1723	1970	889	1953	1006	1769	1462	1725
FUND BALANCE - BEG OF YEAR	7723	7817	8259	9771	11179	13109	14133	15856	17826	18715	20668	21674	23443	24905
FUND BALANCE - END OF YEAR	7817	8259	9771	11179	13109	14133	15856	17826	18715	20668	21674	23443	24905	26630
LESS WORKING CAPITAL	6242	7131	7753	8434	9391	10412	12200	14103	15185	16990	17972	19710	21244	23130
FUNDS AVAILABLE END OF YEAR	1575	1128	2018	2745	3718	3721	3656	3723	3530	3678	3702	3733	3661	3500

MSD DEBT SERVICE COVERAGE CALCULATIONS

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
GROSS REVENUE	28334	31621	34402	37477	41764	46316	54198	62613	67425	75386	79767	87429	94225	102547
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40622	48766	53271	58450	64056	70187	77131	84621
NET REVENUE	5449	6078	7225	7523	8380	9901	13576	13847	14154	16936	15711	17242	17094	17926
PLUS DEPRECIATION	342	370	401	435	471	510	552	598	647	701	759	822	891	965
NET REV + DEPR (A)	5791	6448	7626	7958	8851	10411	14128	14445	14801	17637	16470	18064	17985	18891
TOTAL MSD DEBT SERVICE	5322	5307	5344	5485	5997	7885	10170	10660	11672	12714	13107	13837	14190	14946
TOTAL DEBT SERVICE COVERAGE	1.09	1.22	1.43	1.45	1.48	1.32	1.39	1.36	1.27	1.39	1.26	1.31	1.27	1.26
(A) LESS NON-REV DEBT SVC	4252	4912	6053	6389	7286	8850	12546	12747	13107	15946	14783	16381	16305	17215
MSD REVENUE DEBT SERVICE	3783	3771	3771	3916	4432	6324	8588	8962	9978	11023	11420	12154	12510	13270
D DEBT SERVICE COVERAGE	1.12	1.30	1.61	1.63	1.64	1.40	1.46	1.42	1.31	1.45	1.29	1.35	1.30	1.30

1971 CONSTRUCTION FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #2 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	1410	4740	5255	8455	3425	9225	9545	3630	6660	3265	0
INCOME														
BOND PROCEEDS	0	0	0	1239	4170	4724	7442	3014	8121	8401	3195	5863	2871	0
INVESTMENT INCOME	1037	846	604	345	234	180	252	77	267	212	57	164	55	129
CONNECTION FEES	53	41	35	38	41	45	48	52	57	939	229	72	78	85
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1090	887	639	1622	4445	4949	7742	3143	8445	9552	3481	6099	3004	214
RECOVERIES														
FEDERAL GRANTS	1647	1839	6209	6079	540	0	0	0	0	0	29	92	274	1957
GENERAL OPERATING FUND	165	384	403	598	379	744	1383	1481	1667	2534	2154	2170	2063	1877
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	9221	8690	10401	16850	15017	19972	23479
OTHER ASSESSMENTS	1174	0	0	0	1136	0	0	0	0	0	376	278	0	0
OTHER	113	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	3099	2223	6612	6677	2055	744	1383	10702	10357	12935	19409	17557	22309	27313
EXPENSES														
NEW CONSTRUCTION	5980	6197	10430	12911	7903	5882	9153	13820	18812	22442	22838	23733	25176	23063
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	5980	6197	10430	12911	7903	5882	9153	13820	18812	22442	22838	23733	25176	23063
NET INCOME + (-) EXPENSES	-1791	-3087	-3179	-4612	-1403	-189	-28	25	-10	45	52	-77	137	4464
FUND BALANCE BEG OF YEAR	14541	12750	9663	6484	1872	469	280	252	277	267	312	364	287	424
FUND BALANCE END OF YEAR	12750	9663	6484	1872	469	280	252	277	267	312	364	287	424	4888
LESS WORKING CAPITAL	412	460	1552	1520	135	0	0	0	0	0	7	23	69	489
FUNDS AVAILABLE END OF YEAR	12338	9203	4932	352	334	280	252	277	267	312	357	264	355	4399

MASTER PLAN FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #2 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	0	0	11980	12270	0	0	0	0	0	0	6920
INCOME														
BOND PROCEEDS	0	0	0	0	0	10645	10801	0	0	0	0	0	0	6190
INVESTMENT INCOME	1603	1709	1791	1728	1234	1187	1111	654	755	727	821	892	639	712
CONNECTION FEES	0	0	0	0	0	0	271	2909	734	1820	1998	656	2208	1114
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1603	1709	1791	1728	1234	11832	12183	3563	1489	2547	2819	1548	2847	8016
RECOVERIES														
FEDERAL GRANTS	186	433	3508	11169	34805	38515	37255	7254	6747	3517	3686	6751	19322	26195
GENERAL OPERATING FUND	9	42	74	336	736	944	1200	460	422	445	402	456	721	1220
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	195	475	3582	11505	35541	39459	38455	7714	7169	3962	4088	7207	20043	27415
EXPENSES														
NEW CONSTRUCTION	590	619	4751	15231	47231	52494	51040	10066	9443	5343	5492	9614	26801	36402
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	590	619	4751	15231	47231	52494	51040	10066	9443	5343	5492	9614	26801	36402
NET INCOME + (-) EXPENSES	1208	1565	622	-1998	-10456	-1203	-402	1211	-785	1166	1415	-859	-3911	-971
FUND BALANCE BEG OF YEAR	20242	21450	23015	23637	21639	11183	9980	9578	10789	10004	11170	12585	11726	7815
FUND BALANCE END OF YEAR	21450	23015	23637	21639	11183	9980	9578	10789	10004	11170	12585	11726	7815	6844
LESS WORKING CAPITAL	47	108	877	2792	8701	9629	9314	1814	1687	879	922	1688	4831	6549
FUNDS AVAILABLE END OF YEAR	21403	22907	22760	18847	2482	351	264	8975	8317	10291	11663	10038	2984	295

GENERAL OPERATING FUND
ESTIMATE OF EXPENDITURES
(COSTS IN $1,000'S)
07/28/81
SCENARIO RUN 2
INFLATION RATES: PWR=13.15% OTH= 8.30%

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ADMIN, O&M COST BASE	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1
ONE TIME EXPENSE (1)	471.0	800.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POWER COST BASE	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7
MF SIDESTREAM TP (2)														
POWER	0.0	0.0	0.0	50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
OTHER	0.0	0.0	0.0	200.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0
MORRIS FORMAN OTHER RCAP	162.9	488.7	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5
DROP IN MFWTP POWER $(3)	0.0	0.0	0.0	0.0	0.0	0.0	-71.7	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5
ADD SEWER MAINT: NEW (4)	4.2	5.6	7.5	11.1	16.8	20.2	28.6	83.1	100.7	147.7	188.5	223.2	270.4	309.6
ADD SEWER MAINT: ACQ (5)	0.0	16.0	27.6	27.6	27.6	27.6	61.3	230.2	236.6	249.8	251.8	253.7	271.4	271.4
CUST SERV: NEW CUST (6)	4.5	16.0	25.3	30.2	36.8	41.3	70.3	218.1	238.2	301.3	351.3	399.3	470.4	528.4
WEST CO PUMP STATION (7)														
POWER	107.8	107.8	107.8	107.8	107.8	107.8	89.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	136.3	136.3	136.3	136.3	136.3	136.3	113.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WEST COUNTY WTP (8)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	81.2	469.3	483.7	519.8	550.5	579.4	622.7	657.0
POWER	0.0	0.0	0.0	0.0	0.0	0.0	56.6	261.5	269.5	289.7	306.8	322.9	347.0	366.1
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	468.6	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0
NORTHERN DITCH PS (9)														
POWER	27.8	27.8	27.8	27.8	27.8	27.8	24.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0
OTHER	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
OKOLONA LIFT STA - 7(10)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	8.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
VILLA ANA WTP (11)														
POWER	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	46.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH COUNTY WTP (12)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GOOSE CREEK PS (13)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTALS UNINFLATED POWER	2980.8	2971.3	2971.3	3021.3	3121.3	3121.3	3085.4	2827.9	2835.9	2856.1	2873.2	2889.3	2913.4	2932.5
OTHER	19904.3	20541.9	19927.5	20136.0	20548.3	20556.2	21163.2	24064.3	24122.8	24282.2	24405.7	24519.2	24698.5	24830.0
TOTALS	22885.1	23513.2	22898.8	23157.3	23669.6	23677.5	24248.6	26892.2	26958.7	27138.3	27278.9	27408.5	27611.9	27762.5
TOTALS INFLATED POWER	2980.8	3362.0	3804.1	4376.8	5116.3	5789.1	6475.0	6715.0	7619.5	8682.9	9883.5	11245.9	12830.8	14613.3
OTHER	19904.3	22180.5	23372.7	25577.5	28267.7	30625.6	34147.0	42050.6	45651.5	49767.3	54172.1	58941.2	64300.2	70007.8
TOTALS	22885.1	25542.5	27176.8	29954.3	33384.0	36414.7	40622.0	48765.6	53271.0	58450.2	64055.6	70187.1	77131.0	84621.1

NOTES

(1) NOT TO BE INFLATED
(2) OPERATION BEGINS ON 3/01/85
(3) BEGINS ON 4/28/88
(4) AT $1,200 PER MILE (1981)
(5) AT $2,000 PER MILE (1981)
(6) AT $11.00 PER NEW CUSTOMER (1981)
(7) COST INCLUDED IN WEST COUNTY WTP AFTER 4/28/88
(8) BEGINS ON 4/28/88 (45/63 MGD)
(9) OPERATION MODIFIED ON 4/28/88
(10) MSD ASSUMES OPERATION ON 4/28/88
(11) PLANT OUT OF SERVICE IN JULY, 1982
(12) BEGINS ON 10/19/95
(13) BEGINS ON 12/01/96

GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #3 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
EQUIVALENT CUSTOMERS														
BASE	288298	288704	289751	290597	291041	291643	292048	294692	308128	309893	312633	314503	317391	327336
GROWTH	406	1047	846	444	602	405	2644	13436	1765	2740	1870	2888	9945	6229
TOTAL	288704	289751	290597	291041	291643	292048	294692	308128	309893	312633	314503	317391	327336	333565
SERVICE CHARGE ($/YR)	94	107	116	126	140	151	175	192	209	225	254	264	286	310
SERVICE CHARGE INCREASE/YR	0.0%	13.8%	8.4%	8.6%	11.1%	7.9%	15.9%	9.7%	8.9%	7.7%	12.9%	3.9%	8.3%	8.4%
REVENUE														
BASE SERVICE CHARGE	27100	30891	33611	36615	40746	44038	51108	56581	64399	69726	79409	83029	90774	101474
GROWTH SERVICE CHARGE	38	112	98	56	84	61	463	2580	369	617	475	762	2844	1931
SUBTOTAL	27138	31003	33709	36671	40830	44099	51571	59161	64768	70343	79884	83791	93618	103405
INVESTMENT INCOME	574	618	693	807	928	1027	1124	1253	1376	1476	1603	1726	1850	2023
OTHER INCOME	622	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1196	618	693	807	928	1027	1124	1253	1376	1476	1603	1726	1850	2023
TOTAL REVENUE	28334	31621	34402	37478	41758	45126	52695	60414	66144	71819	81487	85517	95468	105428
RECOVERIES														
FEDERAL GRANT PROJECTS														
MP GOF CONTRIBUTIONS	31	44	42	201	696	920	1012	595	701	766	1385	1400	1217	845
1971 CF CONTRIBUTIONS	4	87	68	85	41	0	0	0	0	0	18	107	90	90
TOTAL	35	131	110	286	737	920	1012	595	701	766	1403	1507	1307	935
FEDERAL RECOVERIES	26	98	83	215	553	690	759	446	526	575	1052	1130	980	701
GOF DIRECT RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	26	98	83	215	553	690	759	446	526	575	1052	1130	980	701
ASSESSMENT RECOVERIES														
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	379	179	385	69	461	260	61
OTHER ASSESSMENTS	131	0	0	0	111	0	0	0	0	0	37	20	0	0
SUBTOTAL	131	0	0	0	111	0	0	379	179	385	106	481	260	61
OTHER RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	157	98	83	215	664	690	759	825	705	960	1158	1611	1240	762

PAGE 2

GENERAL OPERATING FUND

FLOW OF FUNDS

(COSTS IN 1,000'S)

07/28/81

RUN #3 (INFLATED)

	FISCAL	YEARS												
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40555	48061	52505	58010	63700	69874	77468	86087
CAPITAL CONTRIBUTIONS														
1971 CONST FUND PROJECTS	165	384	403	598	602	892	1289	1342	1462	1606	1225	751	1076	1284
MASTER PLAN FUND PROJECTS	31	44	42	216	739	938	1012	595	701	766	1385	1400	1217	845
TOTAL CAPITAL CONTRIBUTIONS	196	428	445	814	1341	1830	2301	1937	2163	2372	2610	2151	2293	2129
DEBT SERVICE														
1971 CONST FUND BONDS(OLD)	3783	3771	3771	3762	3759	3763	3757	3756	3761	3760	3759	3763	3761	3763
1971 CONST FUND BONDS(NEW)	0	0	0	154	673	1315	2268	2757	3576	3755	4817	4817	4817	5820
MASTER PLAN BONDS(NEW)	0	0	0	0	0	67	1327	1327	1654	2098	3859	3859	4451	4451
SUBTOTAL	3783	3771	3771	3916	4432	5145	7352	7840	8991	9613	12435	12439	13029	14034
KPAA LOAN	1337	1337	1378	1378	1378	1378	1379	1379	1379	1380	1380	1380	1381	1381
CITY BONDS	202	199	195	191	187	183	179	176	172	168	164	160	156	152
OKOLONA BONDS	0	0	0	0	0	0	24	143	143	143	143	143	143	143
SUBTOTAL	1539	1536	1573	1569	1565	1561	1582	1698	1694	1691	1687	1683	1680	1676
TOTAL DEBT SERVICE	5322	5307	5344	5485	5997	6706	8934	9538	10685	11304	14122	14122	14709	15710
INCOME + OR - EXPENSES	88	441	1519	1440	1700	865	1664	1703	1496	1093	2213	981	2238	2264
FUND BALANCE - BEG OF YEAR	7723	7811	8252	9772	11211	12911	13777	15441	17144	18639	19732	21945	22927	25165
FUND BALANCE - END OF YEAR	7811	8252	9772	11211	12911	13777	15441	17144	18639	19732	21945	22927	25165	27429
LESS WORKING CAPITAL	6242	7131	7753	8434	9391	10143	11861	13607	14897	16179	18373	19272	21532	23783
FUNDS AVAILABLE END OF YEAR	1569	1121	2019	2777	3520	3634	3580	3537	3742	3553	3572	3655	3633	3646
	******	******	******	******	******	******	******	******	******	******	******	******	******	******
							MSD DEBT SERVICE COVERAGE CALCULATIONS							
GROSS REVENUE	28334	31621	34402	37478	41758	45126	52695	60414	66144	71819	81487	85517	95468	105428
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40555	48061	52505	58010	63700	69874	77468	86087
NET REVENUE	5449	6078	7225	7524	8374	8711	12140	12353	13639	13809	17787	15643	18000	19341
PLUS DEPRECIATION	342	370	401	435	471	510	552	598	647	701	759	822	891	965
NET REV + DEPR (A)	5791	6448	7626	7959	8845	9221	12692	12951	14286	14510	18546	16465	18891	20306
TOTAL MSD DEBT SERVICE	5322	5307	5344	5485	5997	6706	8934	9538	10685	11304	14122	14122	14709	15710
TOTAL DEBT SERVICE COVERAGE	1.09	1.22	1.43	1.45	1.47	1.38	1.42	1.36	1.34	1.28	1.31	1.17	1.28	1.29
(A) LESS NON-REV DEBT SVC	4252	4912	6053	6390	7280	7660	11110	11253	12592	12819	16859	14782	17211	18630
MSD REVENUE DEBT SERVICE	3783	3771	3771	3916	4432	5145	7352	7840	8991	9613	12435	12439	13029	14034
MSD DEBT SERVICE COVERAGE	1.12	1.30	1.61	1.63	1.64	1.49	1.51	1.44	1.40	1.33	1.36	1.19	1.32	1.33

1971 CONSTRUCTION FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #3 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	1410	4740	5860	8700	4465	7480	1635	9690	0	0	9155
INCOME														
BOND PROCEEDS	0	0	0	1239	4170	5156	7757	3929	6584	1439	8528	0	0	8059
INVESTMENT INCOME	1037	846	604	345	225	191	268	120	219	0	296	356	587	544
CONNECTION FEES	53	41	35	38	41	45	48	52	57	939	229	72	78	85
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1090	887	639	1622	4436	5392	8073	4101	6860	2378	9053	428	665	8688
RECOVERIES														
FEDERAL GRANTS	1647	1839	6209	6079	540	0	0	0	0	0	29	92	274	1957
GENERAL OPERATING FUND	165	384	403	598	602	892	1289	1342	1462	1606	1225	751	1076	1284
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	9221	8690	14281	2573	17087	9440	2226
OTHER ASSESSMENTS	1174	0	0	0	1136	0	0	0	0	0	376	278	0	0
OTHER	113	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	3099	2223	6612	6677	2278	892	1289	10563	10152	15887	4203	18208	10790	5467
EXPENSES														
NEW CONSTRUCTION	5980	6197	10430	12911	8126	6453	9385	14612	17013	18267	13270	9159	14609	19948
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	5980	6197	10430	12911	8126	6453	9385	14612	17013	18267	13270	9159	14609	19948
NET INCOME + (-) EXPENSES	-1791	-3087	-3179	-4612	-1412	-169	-23	52	-1	-2	-14	9477	-3154	-5793
FUND BALANCE BEG OF YEAR	14541	12750	9663	6484	1872	460	291	268	320	319	317	303	9780	6626
FUND BALANCE END OF YEAR	12750	9663	6484	1872	460	291	268	320	319	317	303	9780	6626	833
LESS WORKING CAPITAL	412	460	1552	1520	135	0	0	0	0	0	7	23	69	489
FUNDS AVAILABLE END OF YEAR	12338	9203	4932	352	325	291	268	320	319	317	296	9757	6557	344

MASTER PLAN FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/25/81
RUN #3 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	0	0	615	11500	0	2985	4050	16075	0	5405	0
INCOME														
BOND PROCEEDS	0	0	0	0	0	539	10222	0	2627	3563	14150	16231	4757	0
INVESTMENT INCOME	1602	1711	1823	1912	1661	1020	1011	497	542	438	957	1325	806	483
CONNECTION FEES	0	0	0	0	0	0	271	2909	441	303	262	151	2252	3321
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1602	1711	1823	1912	1661	1559	11504	3406	3610	4304	15369	17707	7815	3804
RECOVERIES														
FEDERAL GRANTS	242	122	1767	1941	26228	33195	33725	13160	18494	14746	32167	43876	32116	10391
GENERAL OPERATING FUND	31	44	42	216	739	938	1012	595	701	766	1385	1400	1217	845
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	273	166	1809	2157	26967	34133	34737	13755	19195	15512	33552	45276	33333	11236
EXPENSES														
NEW CONSTRUCTION	687	207	2398	2806	35901	45426	46082	18239	25542	20778	44494	60014	44207	14930
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	687	207	2398	2806	35901	45426	46082	18239	25542	20778	44494	60014	44207	14930
NET INCOME + (-) EXPENSES	1188	1670	1234	1263	-7273	-9734	159	-1078	-2737	-962	4427	2969	-3059	110
FUND BALANCE BEG OF YEAR	20242	21430	23100	24334	25597	18324	8590	8749	7671	4934	3972	8399	11368	8309
FUND BALANCE END OF YEAR	21430	23100	24334	25597	18324	8590	8749	7671	4934	3972	8399	11368	8309	8419
LESS WORKING CAPITAL	61	31	442	485	6557	8299	8431	3290	4624	3687	8042	10969	8029	2598
FUNDS AVAILABLE END OF YEAR	21369	23069	23892	25112	11767	291	318	4381	310	285	357	399	280	5821

GENERAL OPERATING FUND
ESTIMATE OF EXPENDITURES
(COSTS IN $1,000'S)
07/25/81
SCENARIO RUN 3
INFLATION RATES: PWR=13.15% OTH= 8.30%

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ADMIN, O&M COST BASE	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1
ONE TIME EXPENSE (1)	471.0	800.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POWER COST BASE	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7
MF SIDESTREAM TP (2)														
POWER	0.0	0.0	0.0	50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
OTHER	0.0	0.0	0.0	200.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0
MORRIS FORMAN OTHER MCAP	162.9	488.7	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5
DROP IN MFWTP POWER $(3)	0.0	0.0	0.0	0.0	0.0	0.0	-71.7	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5
ADD SEWER MAINT: NEW (4)	4.2	5.6	7.5	11.1	16.8	20.2	28.6	83.1	98.8	135.9	163.0	196.4	234.3	245.9
ADD SEWER MAINT: ACQ (5)	0.0	16.0	27.6	27.6	27.6	27.6	61.3	230.2	236.6	239.8	244.8	266.4	363.3	405.8
CUST SERV: NEW CUST (6)	4.5	16.0	25.3	30.2	34.8	41.3	70.3	218.1	237.5	267.7	288.3	320.0	429.4	497.9
WEST CO PUMP STATION (7)														
POWER	107.8	107.8	107.8	107.8	107.8	107.8	89.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	136.3	136.3	136.3	136.3	136.3	136.3	113.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WEST COUNTY WTP (8)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	116.6	474.9	488.2	499.8	504.8	511.5	543.1	590.2
POWER	0.0	0.0	0.0	0.0	0.0	0.0	56.6	284.4	293.1	300.8	304.1	308.4	324.3	328.9
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	391.7	2240.0	2240.0	2240.0	2240.0	2240.0	2316.9	2680.0
NORTHERN DITCH PS (9)														
POWER	27.8	27.8	27.8	27.8	27.8	27.8	24.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0
OTHER	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
OKOLONA LIFT STA - 7(10)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	8.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
VILLA ANA WTP (11)														
POWER	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	46.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH COUNTY WTP (12)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	23.9	39.5	65.2	67.8
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	21.8	39.8	69.5	72.5
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	258.6	330.0	330.0	330.0	330.0
GOOSE CREEK PS (13)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	6.5	19.4	20.5
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.2	50.0	50.0	50.0
TOTALS UNINFLATED POWER	2980.8	2971.3	2971.3	3021.3	3121.3	3121.3	3085.4	2850.8	2859.5	2876.0	2895.0	2921.1	2979.6	2988.3
OTHER	19904.3	20541.9	19927.5	20136.0	20548.3	20556.2	21121.7	23629.9	23684.7	24038.0	24211.6	24337.4	24715.8	25251.2
TOTALS	22885.1	23513.2	22898.8	23157.3	23669.6	23677.5	24207.1	26480.7	26544.2	26914.0	27106.6	27258.5	27695.4	28239.5
TOTALS INFLATED POWER	2980.8	3362.0	3804.1	4376.8	5116.3	5789.1	6475.0	6769.4	7682.9	8743.4	9958.5	11369.6	13122.4	14891.3
OTHER	19904.3	22180.5	23372.7	25577.5	28267.7	30625.6	34080.0	41291.5	44822.4	49266.8	53741.3	58504.2	64345.2	71195.4
TOTALS	22885.1	25542.5	27176.8	29954.3	33384.0	36414.7	40555.0	48060.9	52505.3	58010.2	63699.8	69873.8	77467.6	86086.7

NOTES

(1) NOT TO BE INFLATED
(2) OPERATION BEGINS ON 3/01/85
(3) BEGINS ON 4/28/88
(4) AT $1,200 PER MILE (1981)
(5) AT $2,000 PER MILE (1981)
(6) AT $11.00 PER NEW CUSTOMER (1981)
(7) COST INCLUDED IN WEST COUNTY WTP AFTER 4/28/88
(8) BEGINS ON 4/28/88 (30/39 MGD); UPGRADED 4/28/94 (45/63 MGD)
(9) OPERATION MODIFIED ON 4/28/88
(10) MSD ASSUMES OPERATION ON 4/28/88
(11) PLANT OUT OF SERVICE IN JULY, 1982
(12) BEGINS ON 9/10/90
(13) BEGINS ON 11/01/91

GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #4 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
EQUIVALENT CUSTOMERS														
BASE	288298	288704	289751	290597	291041	291643	292048	294692	308128	309893	312633	314503	317391	327336
GROWTH	406	1047	846	444	602	405	2644	13436	1765	2740	1870	2888	9945	6229
TOTAL	288704	289751	290597	291041	291643	292048	294692	308128	309893	312633	314503	317391	327336	333565
SERVICE CHARGE ($/YR)	94	107	116	126	141	156	181	199	215	232	255	270	288	310
SERVICE CHARGE INCREASE/YR	0.0%	13.8%	8.4%	8.6%	11.9%	10.6%	16.0%	9.9%	8.0%	7.9%	9.9%	5.9%	6.7%	7.6%
REVENUE														
BASE SERVICE CHARGE	27100	30891	33611	36615	41037	45496	52861	58644	66248	71895	79721	84916	91409	101474
GROWTH SERVICE CHARGE	38	112	98	56	85	63	479	2674	379	636	477	780	2864	1931
SUBTOTAL	27138	31003	33709	36671	41122	45559	53340	61318	66627	72531	80198	85696	94273	103405
INVESTMENT INCOME	574	618	693	806	936	1049	1157	1291	1407	1510	1626	1741	1866	2022
OTHER INCOME	622	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1196	618	693	806	936	1049	1157	1291	1407	1510	1626	1741	1866	2022
TOTAL REVENUE	28334	31621	34402	37477	42058	46608	54497	62609	68034	74041	81824	87437	96139	105427
RECOVERIES														
FEDERAL GRANT PROJECTS														
MP GOF CONTRIBUTIONS	9	42	74	326	812	1018	1123	592	687	755	1111	978	824	814
1971 CF CONTRIBUTIONS	4	87	68	85	41	0	0	0	0	0	18	107	90	90
TOTAL	13	129	142	411	853	1018	1123	592	687	755	1129	1085	914	904
FEDERAL RECOVERIES	10	97	107	308	640	764	842	444	515	566	847	814	686	678
GOF DIRECT RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	10	97	107	308	640	764	842	444	515	566	847	814	686	678
ASSESSMENT RECOVERIES														
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	379	179	385	69	461	260	61
OTHER ASSESSMENTS	131	0	0	0	111	0	0	0	0	0	37	20	0	0
SUBTOTAL	131	0	0	0	111	0	0	379	179	385	106	481	260	61
OTHER RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	141	97	107	308	751	764	842	823	694	951	953	1295	946	739

GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN 04 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40622	48766	53266	58831	64585	70829	78355	86087
CAPITAL CONTRIBUTIONS														
1971 CONST FUND PROJECTS	165	384	403	598	602	892	1289	1342	1462	1606	1225	751	1076	1284
MASTER PLAN FUND PROJECTS	9	42	74	341	855	1036	1123	592	687	755	1111	978	824	814
TOTAL CAPITAL CONTRIBUTIONS	174	426	477	939	1457	1928	2412	1934	2149	2361	2336	1729	1900	2098
DEBT SERVICE														
1971 CONST FUND BONDS(OLD)	3783	3771	3771	3762	3759	3763	3757	3756	3761	3760	3759	3763	3761	3763
1971 CONST FUND BONDS(NEW)	0	0	0	154	673	1315	2268	2757	3576	3755	4817	4817	4817	5820
MASTER PLAN BONDS(NEW)	0	0	0	0	0	1420	2861	2861	2928	3276	3895	4616	4616	4616
SUBTOTAL	3783	3771	3771	3916	4432	6498	8886	9374	10265	10791	12471	13196	13194	14199
KPAA LOAN	1337	1337	1378	1378	1378	1378	1379	1379	1379	1380	1380	1380	1381	1381
CITY BONDS	202	199	195	191	187	183	179	176	172	168	164	160	156	152
OKOLONA BONDS	0	0	0	0	0	0	24	143	143	143	143	143	143	143
SUBTOTAL	1539	1536	1573	1569	1565	1561	1582	1698	1694	1691	1687	1683	1680	1676
TOTAL DEBT SERVICE	5322	5307	5344	5485	5997	8059	10468	11072	11959	12482	14158	14879	14874	15875
INCOME + OR - EXPENSES	94	442	1511	1407	1971	970	1837	1660	1354	1318	1698	1295	1956	2106
FUND BALANCE - BEG OF YEAR	7723	7817	8259	9771	11177	13148	14119	15956	17616	18970	20288	21985	23280	25236
FUND BALANCE - END OF YEAR	7817	8259	9771	11177	13148	14119	15956	17616	18970	20288	21985	23280	25236	27342
LESS WORKING CAPITAL	6242	7131	7753	8434	9458	10479	12268	14103	15324	16682	18446	19710	21683	23783
FUNDS AVAILABLE END OF YEAR	1575	1128	2018	2743	3690	3640	3688	3513	3646	3606	3539	3570	3553	3559
MSD DEBT SERVICE COVERAGE CALCULATIONS														
GROSS REVENUE	28334	31621	34402	37477	42058	46608	54497	62609	68034	74041	81824	87437	96139	105427
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40622	48766	53266	58831	64585	70829	78355	86087
NET REVENUE	5449	6078	7225	7523	8674	10193	13875	13843	14768	15210	17239	16608	17784	19340
PLUS DEPRECIATION	342	370	401	435	471	510	552	598	647	701	759	822	891	965
NET REV + DEPR (A)	5791	6448	7626	7958	9145	10703	14427	14441	15415	15911	17998	17430	18675	20305
TOTAL MSD DEBT SERVICE	5322	5307	5344	5485	5997	8059	10468	11072	11959	12482	14158	14879	14874	15875
TOTAL DEBT SERVICE COVERAGE	1.09	1.22	1.43	1.45	1.52	1.33	1.38	1.30	1.29	1.27	1.27	1.17	1.26	1.28
(A) LESS NON-REV DEBT SVC	4252	4912	6053	6389	7580	9142	12845	12743	13721	14220	16311	15747	16995	18629
MSD REVENUE DEBT SERVICE	3783	3771	3771	3916	4432	6498	8886	9374	10265	10791	12471	13196	13194	14199
MSD DEBT SERVICE COVERAGE	1.12	1.30	1.61	1.63	1.71	1.41	1.45	1.36	1.34	1.32	1.31	1.19	1.29	1.31

1971 CONSTRUCTION FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #4 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	1410	4740	5860	8700	4465	7480	1635	9690	0	0	9155
INCOME														
BOND PROCEEDS	0	0	0	1239	4170	5156	7757	3929	6584	1439	8528	0	0	8059
INVESTMENT INCOME	1037	846	604	345	225	191	268	120	219	0	296	356	587	544
CONNECTION FEES	53	41	35	38	41	45	48	52	57	939	229	72	78	85
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1090	887	639	1622	4436	5392	8073	4101	6860	2378	9053	428	665	8688
RECOVERIES														
FEDERAL GRANTS	1647	1839	6209	6079	540	0	0	0	0	0	29	92	274	1957
GENERAL OPERATING FUND	165	384	403	598	602	892	1289	1342	1462	1606	1225	751	1076	1284
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	9221	8690	14281	2573	17087	9440	2226
OTHER ASSESSMENTS	1174	0	0	0	1136	0	0	0	0	0	376	278	0	0
OTHER	113	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	3099	2223	6612	6677	2278	892	1289	10563	10152	15887	4203	18208	10790	5467
EXPENSES														
NEW CONSTRUCTION	5980	6197	10430	12911	8126	6453	9385	14612	17013	18267	13270	9159	14609	19948
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	5980	6197	10430	12911	8126	6453	9385	14612	17013	18267	13270	9159	14609	19948
NET INCOME + (-) EXPENSES	-1791	-3087	-3179	-4612	-1412	-169	-23	52	-1	-2	-14	9477	-3154	-5793
FUND BALANCE BEG OF YEAR	14541	12750	9663	6484	1872	460	291	268	320	319	317	303	9780	6626
FUND BALANCE END OF YEAR	12750	9663	6484	1872	460	291	268	320	319	317	303	9780	6626	833
LESS WORKING CAPITAL	412	460	1552	1520	135	0	0	0	0	0	7	23	69	489
FUNDS AVAILABLE END OF YEAR	12338	9203	4932	352	325	291	268	320	319	317	296	9757	6557	344

MASTER PLAN FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/28/81
RUN #4 (INFLATED)

FISCAL YEARS

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	0	0	12965	13150	0	615	3180	5650	6585	0	0
INCOME														
BOND PROCEEDS	0	0	0	0	0	11412	11577	0	539	2796	4973	5794	0	0
INVESTMENT INCOME	1603	1709	1791	1728	1223	1216	1173	603	504	380	428	510	195	109
CONNECTION FEES	0	0	0	0	0	0	271	2909	441	303	262	151	2252	3321
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1603	1709	1791	1728	1223	12628	13021	3512	1484	3479	5663	6455	2447	3430
RECOVERIES														
FEDERAL GRANTS	186	433	3508	11175	34947	39612	39100	13349	17223	12739	14834	17287	9925	10012
GENERAL OPERATING FUND	9	42	74	341	855	1036	1123	592	687	755	1111	978	824	814
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	195	475	3582	11516	35802	40648	40223	13941	17910	13494	15945	18265	10749	10826
EXPENSES														
NEW CONSTRUCTION	590	619	4751	15242	47644	54080	53359	18488	23834	18090	21110	24141	14226	14393
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	590	619	4751	15242	47644	54080	53359	18488	23834	18090	21110	24141	14226	14393
NET INCOME + (-) EXPENSES	1208	1565	622	-1998	-10619	-804	-115	-1035	-4440	-1117	498	579	-1030	-137
FUND BALANCE BEG OF YEAR	20242	21450	23015	23637	21639	11020	10216	10101	9066	4626	3509	4007	4586	3556
FUND BALANCE END OF YEAR	21450	23015	23637	21639	11020	10216	10101	9066	4626	3509	4007	4586	3556	3419
LESS WORKING CAPITAL	47	108	877	2794	8737	9903	9775	3337	4306	3185	3709	4322	2481	2503
FUNDS AVAILABLE END OF YEAR	21403	22907	22760	18845	2283	313	326	5729	320	324	298	264	1075	916

GENERAL OPERATING FUND
ESTIMATE OF EXPENDITURES
(COSTS IN $1,000'S)
07/28/81
SCENARIO RUN 4
INFLATION RATES: PWR=13.15% OTH= 8.30%

	FISCAL YEARS 1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ADMIN, O&M COST BASE	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1
ONE TIME EXPENSE (1)	471.0	800.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POWER COST BASE	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7
NF SIDESTREAM TP (2)														
POWER	0.0	0.0	0.0	50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
OTHER	0.0	0.0	0.0	200.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0
MORRIS FORMAN OTHER RCAP	162.9	488.7	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5
DROP IN MFWTP POWER $(3)	0.0	0.0	0.0	0.0	0.0	0.0	-71.7	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5
ADD SEWER MAINT: NEW (4)	4.2	5.6	7.5	11.1	16.8	20.2	28.6	83.1	98.8	135.9	163.0	196.4	234.3	245.9
ADD SEWER MAINT: ACQ (5)	0.0	16.0	27.6	27.6	27.6	27.6	61.3	230.2	236.6	239.8	244.8	266.4	363.3	405.8
CUST SERV: NEW CUST (6)	4.5	16.0	25.3	30.2	36.8	41.3	70.3	218.1	237.5	267.7	288.3	320.0	429.4	497.9
WEST CO PUMP STATION (7)														
POWER	107.8	107.8	107.8	107.8	107.8	107.8	89.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	136.3	136.3	136.3	136.3	136.3	136.3	113.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WEST COUNTY WTP (8)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	81.2	469.3	483.7	496.4	501.8	509.0	550.5	590.2
POWER	0.0	0.0	0.0	0.0	0.0	0.0	56.6	261.5	269.5	276.6	279.6	283.6	306.8	328.9
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	468.6	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0
NORTHERN DITCH PS (9)														
POWER	27.8	27.8	27.8	27.8	27.8	27.8	24.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0
OTHER	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
OKOLONA LIFT STA - 7(10)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	8.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
VILLA ANA WTP (11)														
POWER	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	46.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH COUNTY WTP (12)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	23.9	39.5	65.2	67.8
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	21.8	39.8	69.5	72.5
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	258.6	330.0	330.0	330.0	330.0
GOOSE CREEK PS (13)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	6.5	19.4	20.5
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.2	50.0	50.0	50.0
TOTALS UNINFLATED POWER	2980.8	2971.3	2971.3	3021.3	3121.3	3121.3	3085.4	2827.9	2835.9	2851.8	2870.5	2896.3	2962.1	2988.3
OTHER	19904.3	20541.9	19927.5	20136.0	20548.3	20556.2	21163.2	24064.3	24120.2	24474.6	24648.6	24774.9	25086.3	25251.2
TOTALS	22885.1	23513.2	22898.8	23157.3	23669.6	23677.5	24248.6	26892.2	26956.1	27326.4	27519.1	27671.2	28048.4	28239.5
TOTALS INFLATED POWER	2980.8	3362.0	3804.1	4376.8	5116.3	5789.1	6475.0	6715.0	7619.5	8669.8	9874.2	11273.1	13045.3	14891.3
OTHER	19904.3	22180.5	23372.7	25577.5	28267.7	30625.6	34147.0	42050.6	45646.6	50161.6	54711.3	59555.9	65309.8	71195.4
TOTALS	22885.1	25542.5	27176.8	29954.3	33384.0	36414.7	40622.0	48765.6	53266.1	58831.4	64585.5	70829.0	78355.1	86086.7

NOTES

(1) NOT TO BE INFLATED
(2) OPERATION BEGINS ON 3/01/85
(3) BEGINS ON 4/28/88
(4) AT $1,200 PER MILE (1981)
(5) AT $2,000 PER MILE (1981)
(6) AT $11.00 PER NEW CUSTOMER (1981)
(7) COST INCLUDED IN WEST COUNTY WTP AFTER 4/28/88
(8) BEGINS ON 4/28/88 (45/63 MGD)
(9) OPERATION MODIFIED ON 4/28/88
(10) MSD ASSUMES OPERATION ON 4/28/88
(11) PLANT OUT OF SERVICE IN JULY, 1982
(12) BEGINS ON 9/10/90
(13) BEGINS ON 11/01/91

GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/30/81
RUN #5 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
EQUIVALENT CUSTOMERS														
BASE	288298	288704	289751	290597	291041	291643	292048	295815	314549	316309	319045	320910	323794	333734
GROWTH	406	1047	846	444	602	405	3767	18734	1760	2736	1865	2884	9940	6225
TOTAL	288704	289751	290597	291041	291643	292048	295815	314549	316309	319045	320910	323794	333734	339959
SERVICE CHARGE ($/YR)	94	107	116	126	142	160	183	199	213	229	250	262	281	303
SERVICE CHARGE INCREASE/YR	0.0%	13.8%	8.4%	8.6%	12.7%	12.7%	14.4%	8.7%	7.0%	7.5%	9.2%	4.8%	7.3%	7.8%
REVENUE														
BASE SERVICE CHARGE	27100	30891	33611	36615	41328	46663	53445	58867	66999	72435	79761	84078	90986	101121
GROWTH SERVICE CHARGE	38	112	98	56	85	65	689	3728	375	627	466	756	2793	1886
SUBTOTAL	27138	31003	33709	36671	41413	46728	54134	62595	67374	73062	80227	84834	93779	103007
INVESTMENT INCOME	574	618	693	803	935	1061	1175	1318	1437	1526	1635	1737	1853	2014
OTHER INCOME	622	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1196	618	693	803	935	1061	1175	1318	1437	1526	1635	1737	1853	2014
TOTAL REVENUE	28334	31621	34402	37474	42348	47789	55309	63913	68811	74588	81862	86571	95632	105021
RECOVERIES														
FEDERAL GRANT PROJECTS														
MP GOF CONTRIBUTIONS	9	46	113	515	1142	1698	1650	592	687	755	1111	978	824	814
1971 CF CONTRIBUTIONS	4	87	68	85	41	0	0	0	0	0	18	107	90	90
TOTAL	13	133	181	600	1183	1698	1650	592	687	755	1129	1085	914	904
FEDERAL RECOVERIES	10	100	136	450	887	1274	1238	444	515	566	847	814	686	678
GOF DIRECT RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	10	100	136	450	887	1274	1238	444	515	566	847	814	686	678
ASSESSMENT RECOVERIES														
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	379	179	385	69	461	260	61
OTHER ASSESSMENTS	131	0	0	0	111	0	0	0	0	0	37	20	0	0
SUBTOTAL	131	0	0	0	111	0	0	379	179	385	106	481	260	61
OTHER RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	141	100	136	450	998	1274	1238	823	694	951	953	1295	946	739

GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/30/81
RUN #5 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40668	49095	53632	59230	65020	71304	78873	86652
CAPITAL CONTRIBUTIONS														
1971 CONST FUND PROJECTS	165	384	403	598	602	892	1289	1342	1462	1606	1225	751	1076	1284
MASTER PLAN FUND PROJECTS	9	46	113	530	1185	1716	1650	592	687	755	1111	978	824	814
TOTAL CAPITAL CONTRIBUTIONS	174	430	516	1128	1787	2608	2939	1934	2149	2361	2336	1729	1900	2098
DEBT SERVICE														
1971 CONST FUND BONDS(OLD)	3783	3771	3771	3762	3759	3763	3757	3756	3761	3760	3759	3763	3761	3763
1971 CONST FUND BONDS(NEW)	0	0	0	154	673	1315	2268	2757	3576	3755	4817	4817	4817	5820
MASTER PLAN BONDS(NEW)	0	0	0	0	92	2214	3554	3554	3554	3554	3554	3554	3554	3554
SUBTOTAL	3783	3771	3771	3916	4524	7292	9579	10067	10891	11069	12130	12134	12132	13137
KPAA LOAN	1337	1337	1378	1378	1378	1378	1379	1379	1379	1380	1380	1380	1381	1381
CITY BONDS	202	199	195	191	187	183	179	176	172	168	164	160	156	152
OKOLONA BONDS	0	0	0	0	0	0	24	143	143	143	143	143	143	143
SUBTOTAL	1539	1536	1573	1569	1565	1561	1582	1698	1694	1691	1687	1683	1680	1676
TOTAL DEBT SERVICE	5322	5307	5344	5485	6089	8853	11161	11765	12585	12760	13817	13817	13812	14813
INCOME + OR - EXPENSES	94	441	1501	1357	2086	1187	1779	1942	1139	1188	1642	1016	1993	2197
FUND BALANCE - BEG OF YEAR	7723	7817	8258	9760	11116	13202	14390	16168	18110	19249	20437	22079	23095	25087
FUND BALANCE - END OF YEAR	7817	8258	9760	11116	13202	14390	16168	18110	19249	20437	22079	23095	25087	27284
LESS WORKING CAPITAL	6242	7131	7753	8434	9525	10747	12451	14397	15496	16804	18452	19512	21569	23692
FUNDS AVAILABLE END OF YEAR	1575	1127	2007	2682	3677	3643	3717	3713	3753	3633	3627	3583	3518	3592

MSD DEBT SERVICE COVERAGE CALCULATIONS

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
GROSS REVENUE	28334	31621	34402	37474	42348	47789	55309	63913	68811	74588	81862	86571	95632	105021
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40668	49095	53632	59230	65020	71304	78873	86652
NET REVENUE	5449	6078	7225	7520	8964	11374	14641	14818	15179	15358	16842	15267	16759	18369
PLUS DEPRECIATION	342	370	401	435	471	510	552	598	647	701	759	822	891	965
NET REV + DEPR (A)	5791	6448	7626	7955	9435	11884	15193	15416	15826	16059	17601	16089	17650	19334
TOTAL MSD DEBT SERVICE	5322	5307	5344	5485	6089	8853	11161	11765	12585	12760	13817	13817	13812	14813
TOTAL DEBT SERVICE COVERAGE	1.09	1.22	1.43	1.45	1.55	1.34	1.36	1.31	1.26	1.26	1.27	1.16	1.28	1.31
(A) LESS NON-REV DEBT SVC	4252	4912	6053	6386	7870	10323	13611	13718	14132	14368	15914	14406	15970	17658
MSD REVENUE DEBT SERVICE	3783	3771	3771	3916	4524	7292	9579	10067	10891	11069	12130	12134	12132	13137
MSD DEBT SERVICE COVERAGE	1.12	1.30	1.61	1.63	1.74	1.42	1.42	1.36	1.30	1.30	1.31	1.19	1.32	1.34

1971 CONSTRUCTION FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/30/81
RUN #5 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	1410	4740	5860	8700	4465	7480	1635	9690	0	0	9155
INCOME														
BOND PROCEEDS	0	0	0	1239	4170	5156	7757	3929	6584	1439	8528	0	0	8059
INVESTMENT INCOME	1037	846	604	345	225	191	268	120	219	0	296	356	587	544
CONNECTION FEES	53	41	35	38	41	45	48	52	57	939	229	72	78	85
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1090	887	639	1622	4436	5392	8073	4101	6860	2378	9053	428	665	8688
RECOVERIES														
FEDERAL GRANTS	1647	1839	6209	6079	540	0	0	0	0	0	29	92	274	1957
GENERAL OPERATING FUND	165	384	403	598	602	892	1289	1342	1462	1606	1225	751	1076	1284
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	9221	8690	14281	2573	17087	9440	2226
OTHER ASSESSMENTS	1174	0	0	0	1136	0	0	0	0	0	376	278	0	0
OTHER	113	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	3099	2223	6612	6677	2278	892	1289	10563	10152	15887	4203	18208	10790	5467
EXPENSES														
NEW CONSTRUCTION	5980	6197	10430	12911	8126	6453	9385	14612	17013	18267	13270	9159	14609	19948
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	5980	6197	10430	12911	8126	6453	9385	14612	17013	18267	13270	9159	14609	19948
NET INCOME + (-) EXPENSES	-1791	-3087	-3179	-4612	-1412	-169	-23	52	-1	-2	-14	9477	-3154	-5793
FUND BALANCE BEG OF YEAR	14541	12750	9663	6484	1872	460	291	268	320	319	317	303	9780	6626
FUND BALANCE END OF YEAR	12750	9663	6484	1872	460	291	268	320	319	317	303	9780	6626	833
LESS WORKING CAPITAL	412	460	1552	1520	135	0	0	0	0	0	7	23	69	489
FUNDS AVAILABLE END OF YEAR	12338	9203	4932	352	325	291	268	320	319	317	296	9757	6557	344

MASTER PLAN FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/30/81
RUN #5 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	0	840	19370	12235	0	0	0	0	0	0	0
INCOME														
BOND PROCEEDS	0	0	0	0	739	17051	10769	0	0	0	0	0	0	0
INVESTMENT INCOME	1603	1708	1788	1702	1157	1397	1137	693	1437	1163	875	529	214	129
CONNECTION FEES	0	0	0	0	0	0	2417	13892	431	293	251	139	2239	3307
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1603	1708	1788	1702	1896	18448	14323	14585	1868	1456	1126	668	2453	3436
RECOVERIES														
FEDERAL GRANTS	186	442	3601	11602	36186	44690	43880	13350	17223	12739	14834	17287	9925	10012
GENERAL OPERATING FUND	9	46	113	530	1185	1716	1650	592	687	755	1111	978	824	814
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	195	488	3714	12132	37371	46406	45530	13942	17910	13494	15945	18265	10749	10826
EXPENSES														
NEW CONSTRUCTION	590	635	4915	16244	51111	62561	60259	18488	23834	18090	21110	24141	14226	14393
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	590	635	4915	16244	51111	62561	60259	18488	23834	18090	21110	24141	14226	14393
NET INCOME + (-) EXPENSES	1208	1561	587	-2410	-11844	2293	-406	10039	-4056	-3140	-4039	-5208	-1024	-131
FUND BALANCE BEG OF YEAR	20242	21450	23011	23598	21188	9344	11637	11231	21270	17214	14074	10035	4827	3803
FUND BALANCE END OF YEAR	21450	23011	23598	21188	9344	11637	11231	21270	17214	14074	10035	4827	3803	3672
LESS WORKING CAPITAL	47	111	900	2901	9047	11173	10970	3338	4306	3185	3709	4322	2481	2503
FUNDS AVAILABLE END OF YEAR	21403	22900	22698	18287	297	464	261	17932	12908	10889	6326	505	1322	1169

GENERAL OPERATING FUND
ESTIMATE OF EXPENDITURES
(COSTS IN $1,000'S)
07/30/81
SCENARIO RUN 5
INFLATION RATES: PWR=13.15% OTH= 8.30%

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ADMIN, O&M COST BASE	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1
ONE TIME EXPENSE (1)	471.0	800.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POWER COST BASE	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7
MF SIDESTREAM TP (2)														
POWER	0.0	0.0	0.0	50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
OTHER	0.0	0.0	0.0	200.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0
MORRIS FORMAN OTHER RCAP	162.9	488.7	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5
DROP IN MFWTP POWER $(3)	0.0	0.0	0.0	0.0	0.0	0.0	-71.7	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5
ADD SEWER MAINT: NEW (4)	4.2	5.6	7.5	11.1	16.8	20.2	32.1	102.9	118.7	155.8	182.9	216.3	254.2	265.8
ADD SEWER MAINT: ACQ (5)	0.0	16.0	27.6	27.6	27.6	27.6	66.9	261.8	268.2	271.4	276.4	298.0	394.9	437.4
CUST SERV: NEW CUST (6)	4.5	16.0	25.3	30.2	36.8	41.3	82.7	288.8	308.1	338.2	358.7	390.5	499.8	568.3
WEST CO PUMP STATION (7)														
POWER	107.8	107.8	107.8	107.8	107.8	107.8	89.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	136.3	136.3	136.3	136.3	136.3	136.3	113.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WEST COUNTY WTP (8)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	88.4	507.2	523.5	536.1	541.5	548.7	590.2	629.9
POWER	0.0	0.0	0.0	0.0	0.0	0.0	56.6	282.6	291.7	298.7	301.7	305.8	328.9	351.0
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	468.6	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0
NORTHERN DITCH PS (9)														
POWER	27.8	27.8	27.8	27.8	27.8	27.8	24.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0
OTHER	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
OKOLONA LIFT STA - 7(10)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	8.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
VILLA ANA WTP (11)														
POWER	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	46.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH COUNTY WTP (12)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	23.9	39.5	65.2	67.8
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	21.8	39.8	69.5	72.5
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	258.6	330.0	330.0	330.0	330.0
GOOSE CREEK PS (13)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	6.5	19.4	20.5
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.2	50.0	50.0	50.0
TOTALS UNINFLATED POWER	2980.8	2971.3	2971.3	3021.3	3121.3	3121.3	3085.4	2849.0	2858.1	2873.9	2892.6	2918.5	2984.2	3010.4
OTHER	19904.3	20541.9	19927.5	20136.0	20548.3	20556.2	21191.9	24224.3	24282.1	24636.3	24810.2	24936.6	25247.9	25412.8
TOTALS	22885.1	23513.2	22898.8	23157.3	23669.6	23677.5	24277.3	27073.3	27140.2	27510.2	27702.8	27855.1	28232.1	28423.2
TOTALS INFLATED POWER	2980.8	3362.0	3804.1	4376.8	5116.3	5789.1	6475.0	6765.1	7679.2	8737.0	9950.2	11359.5	13142.6	15001.5
OTHER	19904.3	22180.5	23372.7	25577.5	28267.7	30625.6	34193.3	42330.2	45953.0	50493.0	55070.0	59944.6	65730.5	71651.0
TOTALS	22885.1	25542.5	27176.8	29954.3	33384.0	36414.7	40668.3	49095.3	53632.2	59230.0	65020.2	71304.1	78873.1	86652.5

NOTES

(1) NOT TO BE INFLATED
(2) OPERATION BEGINS ON 3/01/85
(3) BEGINS ON 4/28/88
(4) AT $1,200 PER MILE (1981)
(5) AT $2,000 PER MILE (1981)
(6) AT $11.00 PER NEW CUSTOMER (1981)
(7) COST INCLUDED IN WEST COUNTY WTP AFTER 4/28/88
(8) BEGINS ON 4/28/88 (45/63 MGD)
(9) OPERATION MODIFIED ON 4/28/88
(10) MSD ASSUMES OPERATION ON 4/28/88
(11) PLANT OUT OF SERVICE IN JULY, 1982
(12) BEGINS ON 9/18/90
(13) BEGINS ON 11/01/91

GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/30/81
RUN #6 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
EQUIVALENT CUSTOMERS														
BASE	288298	288704	289751	290597	291041	291643	292048	295815	316550	320307	325042	328913	333795	345736
GROWTH	406	1047	846	444	602	405	3767	20735	3757	4735	3871	4882	11941	8223
TOTAL	288704	289751	290597	291041	291643	292048	295815	316550	320307	325042	328913	333795	345736	353959
SERVICE CHARGE ($/YR)	94	107	116	126	142	160	184	198	211	226	245	257	273	294
SERVICE CHARGE INCREASE/YR	0.0%	13.8%	8.4%	8.6%	12.7%	12.7%	15.0%	7.6%	6.6%	7.1%	8.4%	4.9%	6.2%	7.7%
REVENUE														
BASE SERVICE CHARGE	27100	30891	33611	36615	41328	46663	53737	58571	66792	72389	79635	84531	91126	101646
GROWTH SERVICE CHARGE	38	112	98	56	85	65	693	4106	793	1070	948	1255	3260	2418
SUBTOTAL	27138	31003	33709	36671	41413	46728	54430	62677	67585	73459	80583	85786	94386	104064
INVESTMENT INCOME	574	618	693	802	933	1054	1173	1323	1438	1529	1637	1748	1871	2029
OTHER INCOME	622	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	1196	618	693	802	933	1054	1173	1323	1438	1529	1637	1748	1871	2029
TOTAL REVENUE	28334	31621	34402	37473	42346	47782	55603	64000	69023	74988	82220	87534	96257	106093
RECOVERIES														
FEDERAL GRANT PROJECTS														
MP GOF CONTRIBUTIONS	9	48	121	540	1183	1786	1689	592	687	755	1111	978	824	814
1971 CF CONTRIBUTIONS	4	87	68	85	41	0	0	0	0	0	18	107	90	90
TOTAL	13	135	189	625	1224	1786	1689	592	687	755	1129	1085	914	904
FEDERAL RECOVERIES	10	101	142	469	918	1340	1267	444	515	566	847	814	686	678
GOF DIRECT RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	10	101	142	469	918	1340	1267	444	515	566	847	814	686	678
ASSESSMENT RECOVERIES														
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	379	179	385	69	461	260	61
OTHER ASSESSMENTS	131	0	0	0	111	0	0	0	0	0	37	20	0	0
SUBTOTAL	131	0	0	0	111	0	0	379	179	385	106	481	260	61
OTHER RECOVERIES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	141	101	142	469	1029	1340	1267	823	694	951	953	1295	946	739

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GENERAL OPERATING FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/30/81
RUN #6 (INFLATED)

FISCAL YEARS

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40668	49184	53801	59508	65425	71858	79600	87582
CAPITAL CONTRIBUTIONS														
1971 CONST FUND PROJECTS	165	384	403	598	602	892	1289	1342	1462	1606	1225	751	1076	1284
MASTER PLAN FUND PROJECTS	9	48	121	555	1226	1804	1689	592	687	755	1111	978	824	814
TOTAL CAPITAL CONTRIBUTIONS	174	432	524	1153	1828	2696	2978	1934	2149	2361	2336	1729	1900	2098
DEBT SERVICE														
1971 CONST FUND BONDS(OLD)	3783	3771	3771	3762	3759	3763	3757	3756	3761	3760	3759	3763	3761	3763
1971 CONST FUND BONDS(NEW)	0	0	0	154	673	1315	2268	2757	3576	3755	4817	4817	4817	5820
MASTER PLAN BONDS(NEW)	0	0	0	0	117	2278	3613	3613	3613	3613	3613	3613	3613	3613
SUBTOTAL	3783	3771	3771	3916	4549	7356	9638	10126	10950	11128	12189	12193	12191	13196
KPAA LOAN	1337	1337	1378	1378	1378	1378	1379	1379	1379	1380	1380	1380	1381	1381
CITY BONDS	202	199	195	191	187	183	179	176	172	168	164	160	156	152
OKOLONA BONDS	0	0	0	0	0	0	24	143	143	143	143	143	143	143
SUBTOTAL	1539	1536	1573	1569	1565	1561	1582	1698	1694	1691	1687	1683	1680	1676
TOTAL DEBT SERVICE	5322	5307	5344	5485	6114	8917	11220	11824	12644	12819	13876	13876	13871	14872
INCOME + OR - EXPENSES	94	440	1499	1350	2049	1094	2004	1881	1123	1251	1536	1366	1832	2280
FUND BALANCE - BEG OF YEAR	7723	7817	8257	9757	11106	13155	14250	16253	18134	19257	20508	22044	23410	25241
FUND BALANCE - END OF YEAR	7817	8257	9757	11106	13155	14250	16253	18134	19257	20508	22044	23410	25241	27521
LESS WORKING CAPITAL	6242	7131	7753	8434	9525	10747	12519	14416	15545	16896	18534	19731	21709	23935
FUNDS AVAILABLE END OF YEAR	1575	1126	2004	2672	3630	3503	3734	3718	3712	3612	3510	3679	3532	3586
MSD DEBT SERVICE COVERAGE CALCULATIONS														
GROSS REVENUE	28334	31621	34402	37473	42346	47782	55603	64000	69023	74988	82220	87534	96257	106093
OPERATING EXPENSES	22885	25542	27177	29954	33384	36415	40668	49184	53801	59508	65425	71858	79600	87582
NET REVENUE	5449	6078	7225	7519	8962	11367	14935	14816	15222	15480	16795	15676	16656	18511
PLUS DEPRECIATION	342	370	401	435	471	510	552	598	647	701	759	822	891	965
NET REV + DEPR (A)	5791	6448	7626	7954	9433	11877	15487	15414	15869	16181	17554	16498	17547	19476
TOTAL MSD DEBT SERVICE	5322	5307	5344	5485	6114	8917	11220	11824	12644	12819	13876	13876	13871	14872
TOTAL DEBT SERVICE COVERAGE	1.09	1.22	1.43	1.45	1.54	1.33	1.38	1.30	1.26	1.26	1.27	1.19	1.27	1.31
(A) LESS NON-REV DEBT SVC	4252	4912	6053	6385	7868	10316	13905	13716	14175	14490	15867	14815	15867	17800
MSD REVENUE DEBT SERVICE	3783	3771	3771	3916	4549	7356	9638	10126	10950	11128	12189	12193	12191	13196
MSD DEBT SERVICE COVERAGE	1.12	1.30	1.61	1.63	1.73	1.40	1.44	1.35	1.29	1.30	1.30	1.22	1.30	1.35

1971 CONSTRUCTION FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/29/81
RUN #6 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	1410	4740	5860	8700	4465	7480	1635	9690	0	0	9155
INCOME														
BOND PROCEEDS	0	0	0	1239	4170	5156	7757	3929	6584	1439	8528	0	0	8059
INVESTMENT INCOME	1037	846	604	345	225	191	268	120	219	0	296	356	587	544
CONNECTION FEES	53	41	35	38	41	45	48	52	57	939	229	72	78	85
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1090	887	639	1622	4436	5392	8073	4101	6860	2378	9053	428	665	8688
RECOVERIES														
FEDERAL GRANTS	1647	1839	6209	6079	540	0	0	0	0	0	29	92	274	1957
GENERAL OPERATING FUND	165	384	403	598	602	892	1289	1342	1462	1606	1225	751	1076	1284
ASSESSMENTS FOR MP	0	0	0	0	0	0	0	9221	8690	14281	2573	17087	9440	2226
OTHER ASSESSMENTS	1174	0	0	0	1136	0	0	0	0	0	376	278	0	0
OTHER	113	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	3099	2223	6612	6677	2278	892	1289	10563	10152	15887	4203	18208	10790	5467
EXPENSES														
NEW CONSTRUCTION	5980	6197	10430	12911	8126	6453	9385	14612	17013	18267	13270	9159	14609	19948
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	5980	6197	10430	12911	8126	6453	9385	14612	17013	18267	13270	9159	14609	19948
NET INCOME + (-) EXPENSES	-1791	-3087	-3179	-4612	-1412	-169	-23	52	-1	-2	-14	9477	-3154	-5793
FUND BALANCE BEG OF YEAR	14541	12750	9663	6484	1872	460	291	268	320	319	317	303	9780	6626
FUND BALANCE END OF YEAR	12750	9663	6484	1872	460	291	268	320	319	317	303	9780	6626	833
LESS WORKING CAPITAL	412	460	1552	1520	135	0	0	0	0	0	7	23	69	489
FUNDS AVAILABLE END OF YEAR	12338	9203	4932	352	325	291	268	320	319	317	296	9757	6557	344

MASTER PLAN FUND
FLOW OF FUNDS

(COSTS IN 1,000'S)
07/29/81
RUN #6 (INFLATED)

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
BOND ISSUE REQUIRED	0	0	0	0	1070	19725	12190	0	0	0	0	0	0	0
INCOME														
BOND PROCEEDS	0	0	0	0	939	17366	10729	0	0	0	0	0	0	0
INVESTMENT INCOME	1603	1708	1788	1701	1164	1413	1144	698	1513	1320	1126	890	700	757
CONNECTION FEES	0	0	0	0	0	0	2417	14770	1367	1317	1371	1340	3535	4716
OTHER INCOME	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL INCOME	1603	1708	1788	1701	2103	18779	14290	15468	2880	2637	2497	2230	4235	5473
RECOVERIES														
FEDERAL GRANTS	186	446	3624	11657	36353	45342	44150	13349	17223	12739	14834	17287	9924	10012
GENERAL OPERATING FUND	9	48	121	555	1226	1804	1689	592	687	755	1111	978	824	814
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL RECOVERIES	195	494	3745	12212	37579	47146	45839	13941	17910	13494	15945	18265	10748	10826
EXPENSES														
NEW CONSTRUCTION	590	642	4953	16319	51504	63462	60658	18488	23834	18090	21110	24141	14226	14393
OTHER	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL EXPENSES	590	642	4953	16319	51504	63462	60658	18488	23834	18090	21110	24141	14226	14393
NET INCOME + (-) EXPENSES	1208	1560	580	-2406	-11822	2463	-529	10921	-3044	-1959	-2668	-3646	757	1906
FUND BALANCE BEG OF YEAR	20242	21450	23010	23590	21184	9362	11825	11296	22217	19173	17214	14546	10900	11657
FUND BALANCE END OF YEAR	21450	23010	23590	21184	9362	11825	11296	22217	19173	17214	14546	10900	11657	13563
LESS WORKING CAPITAL	47	112	906	2914	9088	11336	11038	3337	4306	3185	3709	4322	2481	2503
FUNDS AVAILABLE END OF YEAR	21403	22898	22684	18270	274	489	258	18880	14867	14029	10837	6578	9176	11060

GENERAL OPERATING FUND
ESTIMATE OF EXPENDITURES
(COSTS IN $1,000'S)
07/30/81
SCENARIO RUN 6
INFLATION RATES: PWR=13.15% OTH= 8.30%

	FISCAL YEARS													
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
ADMIN, O&M COST BASE	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1	19036.1
ONE TIME EXPENSE (1)	471.0	800.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POWER COST BASE	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7	2835.7
NF SIDESTREAM TP (2)														
POWER	0.0	0.0	0.0	50.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0
OTHER	0.0	0.0	0.0	200.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0	600.0
MORRIS FORMAN OTHER RCAP	162.9	488.7	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5	651.5
DROP IN MFWTP POWER $(3)	0.0	0.0	0.0	0.0	0.0	0.0	-71.7	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5	-430.5
ADD SEWER MAINT: NEW (4)	4.2	5.6	7.5	11.1	16.8	20.2	32.1	103.2	118.9	156.0	183.1	216.5	254.4	266.0
ADD SEWER MAINT: ACQ (5)	0.0	16.0	27.6	27.6	27.6	27.6	66.9	261.8	268.2	271.4	276.4	298.0	394.9	437.4
CUST SERV: NEW CUST (6)	4.5	16.0	25.3	30.2	36.8	41.3	82.7	310.8	352.1	404.2	446.8	500.5	631.8	722.3
WEST CO PUMP STATION (7)														
POWER	107.8	107.8	107.8	107.8	107.8	107.8	89.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	136.3	136.3	136.3	135.3	136.3	136.3	113.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WEST COUNTY WTP (8)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	88.4	523.5	548.7	574.0	592.0	611.9	666.0	718.4
POWER	0.0	0.0	0.0	0.0	0.0	0.0	56.6	291.7	305.8	319.8	329.9	341.0	371.1	400.3
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	468.6	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0	2680.0
NORTHERN DITCH PS (9)														
POWER	27.8	27.8	27.8	27.8	27.8	27.8	24.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0
OTHER	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
OKOLONA LIFT STA - 7(10)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	8.8	52.8	52.8	52.8	52.8	52.8	52.8	52.8
VILLA ANA WTP (11)														
POWER	9.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER	46.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NORTH COUNTY WTP (12)														
SLUDGE DISPOSAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	23.9	39.5	65.2	67.8
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.8	21.8	39.8	69.5	72.5
[illegible]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	258.6	330.0	330.0	330.0	330.0
GOOSE CREEK PS (13)														
POWER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	6.5	19.4	20.5
OTHER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.2	50.0	50.0	50.0
TOTALS UNINFLATED POWER	2980.8	2971.3	2971.3	3021.3	3121.3	3121.3	3085.4	2858.1	2872.2	2895.0	2920.8	2953.7	3026.4	3059.7
OTHER	19904.3	20541.9	19927.5	20136.0	20548.3	20556.2	21191.9	24262.9	24351.5	24740.4	24949.0	25110.0	25455.9	25655.5
TOTALS	22885.1	23513.2	22898.8	23157.3	23669.6	23677.5	24277.3	27121.0	27223.7	27635.4	27869.8	28063.7	28482.3	28715.2
TOTALS INFLATED POWER	2980.8	3362.0	3804.1	4376.8	5116.3	5789.1	6475.0	6786.7	7717.0	8801.2	10047.3	11496.5	13328.5	15247.1
OTHER	19904.3	22180.5	23372.7	25577.5	28267.7	30625.6	34193.3	42397.7	46084.3	50706.4	55378.1	60361.5	66272.0	72335.3
TOTALS	22885.1	25542.5	27176.8	29954.3	33384.0	36414.7	40668.3	49184.4	53801.3	59507.6	65425.4	71858.0	79600.5	87582.4

NOTES

(1) NOT TO BE INFLATED
(2) OPERATION BEGINS ON 3/01/85
(3) BEGINS ON 4/28/88
(4) AT $1,200 PER MILE (1981)
(5) AT $2,000 PER MILE (1981)
(6) AT $11.00 PER NEW CUSTOMER (1981)
(7) COST INCLUDED IN WEST COUNTY WTP AFTER 4/28/88
(8) BEGINS ON 4/28/88 (45/63 MGD)
(9) OPERATION MODIFIED ON 4/28/88
(10) MSD ASSUMES OPERATION ON 4/28/88
(11) PLANT OUT OF SERVICE IN JULY, 1982
(12) BEGINS ON 9/18/90
(13) BEGINS ON 11/01/91

APPENDIX A-2

GUIDE TO
MSD CASH FLOW MODEL

LINE DESCRIPTIONS AND CALCULATIONS USED
IN THE MSD CASH FLOW MODEL
FOR
GENERAL OPERATING FUND

Line Number and Title	Description and Calculations
EQUIVALENT CUSTOMERS	
01 BASE	Number of equivalent customers at the beginning of each fiscal year; FY 82 Base calculated by dividing the proposed FY 82 service charge revenue found in the 1981-82 Capital Projects Budget by $94/year/customer (93.60 rounded) or $27,100,000/94 = 288,298 customers; for succeeding years; L01 = PRIOR L05
02 GROWTH	Number of equivalent customers added during each fiscal year based on scenario assumptions of sewer construction and growth; input each year.
05 TOTAL	Total equivalent customers; L05 = L01 + L02
06 SERVICE CHARGE ($/YR)	Sewer service charge used for each fiscal year beginning with $94/year for FY 82; service charge rate entered or calculated by model for each year as cash flows require.
08 SERVICE CHARGE INCREASE/YR	Percent increase of sewer service charge from prior year; first years percentage is undefined but set to 0%; $L08 = \frac{L06 - PRIOR\ L06}{PRIOR\ L06} \times 100$
REVENUE	
10 BASE SERVICE CHARGE	Revenue produced from base equivalent customers; L10 = L01 x L06
11 GROWTH SERVICE CHARGE	Revenue produced from growth equivalent customers; L11 = L02 x L06
15 SUBTOTAL	Service charge revenue total; L15 = L10 + L11
16 INVESTMENT INCOME	Eight percent of the following: Fund balance at the beginning of the year, plus fifty percent of revenue and recoveries, less fifty percent of operating expenditures; L16 = 0.08 x [L62 + 0.50 x (L15 + L40) - 0.50 x (L41 + L60 + L47)]

Line Number and Title	Description and Calculations
17 OTHER INCOME	Other income; input each year.
18 SUBTOTAL	Income from investments and other sources; L18 = L16 + L17
20 TOTAL REVENUE	Total revenue; L20 = L15 + L18
RECOVERIES	
FEDERAL GRANT PROJECTS	
22 MP GOF CONTRIBUTIONS	One hundred percent of the General Operating Fund expenses that are partially recoverable for those Master Plan projects that are federally funded; input each year.
23 1971 CF CONTRIBUTIONS	One hundred percent of the General Operating Fund expenses that are partially recoverable for those 1971 Construction Fund projects that are federally funded; input each year.
25 TOTAL	Total General Operating Fund expenses that are partially recoverable for those projects that are federally funded; L25 = L22 + L23
26 FEDERAL RECOVERIES	Seventy-five percent of the above total; L26 = 0.75 x L25
27 GOF DIRECT RECOVERIES	Special recoveries from outside sources; input each year.
30 SUBTOTAL	Federal and General Operating Fund direct recoveries; L30 = L26 + L27
ASSESSMENT RECOVERIES	
33 ASSESSMENTS FOR MP	One hundred percent of the force account work on Master Plan Fund assessment projects; recovered in the fiscal year 90 days after construction is completed; input each year.
34 OTHER ASSESSMENTS	One hundred percent of the force account work on 1971 Construction Fund assessment projects; costs recovered in the fiscal year 90 days after construction is completed; input each year.
37 SUBTOTAL	Assessment recoveries total; L37 = L33 + L34

Line Number and Title	Description and Calculations
38 OTHER RECOVERIES	Other recoveries; input each year.
40 TOTAL RECOVERIES	Total recoveries from all sources; L40 = L30 + L37 + L38
41 OPERATING EXPENSES	Operating expenses for each year; see attachments for explanations and specific scenario assumptions effects; input each year.
CAPITAL CONTRIBUTIONS	
42 1971 CONST FUND PROJECTS	One hundred percent of all force account costs for all 1971 Construction Fund projects (GOF contributions from the 1971 Construction Fund Capital Project Budget Reports); input each year.
43 MASTER PLAN FUND PROJECTS	One hundred percent of all force account costs for all Master Plan Fund projects (GOF contributions from the Master Plan Fund Capital Projects Budget Reports); input each year.
47 TOTAL CAPITAL CONTRIBUTIONS	Total 1971 Construction Fund and Master Plan Fund capital contributions; L47 = L42 + L43
DEBT SERVICE	
48 1971 CONST FUND BONDS (OLD)	Debt service schedule on existing 1971 Construction Fund bonds; input each year.
49 1971 CONST FUND BONDS (NEW)	Level debt service at 9 percent interest for 20 years for new issues required to finance the 1971 Construction Fund. (See individual fund reports for size of issue); L49 = Standard debt service formulas times bond issue amount.
50 MASTER PLAN BONDS (NEW)	Level debt service at 9 percent interest for 20 years for new issues required to finance the Master Plan Fund. (See individual fund reports for size of issue); L50 = Standard debt service formulas times bond issue amount.
52 SUBTOTAL	MSD revenue debt service; L52 = L48 + L49 + L50
53 KPAA LOAN	Debt service schedule on existing KPAA loans; input each year.
54 CITY BONDS	Debt service schedule on existing City Bonds; input each year.

Line Number and Title	Description and Calculations
55 OKOLONA BONDS	Debt service schedule on existing Okolona Sewer Construction District revenue bonds assumed to take effect upon MSD takeover of the Okolona system; input each year.
58 SUBTOTAL	MSD non-revenue debt service; L58 = L53 + L54 + L55
60 TOTAL DEBT SERVICE	Total MSD debt service; L60 = L52 + L58
61 INCOME + OR - EXPENSES	Net income over expenses, revenue plus recoveries, less operating expenses, capital contributions and debt service; L61 = L20 + L40 - L41 - L47 - L60
62 FUND BALANCE - BEG OF YEAR	Fund balance and the end of the previous year carried over; FY 82 equals fund balance at the end of FY 81. L62 = PRIOR L63.
63 FUND BALANCE - END OF YEAR	Net income plus fund balance at the beginning of the year; L63 = L62 + L61
64 LESS WORKING CAPITAL	Twenty-three percent of sewer service charge revenue; L64 = 0.25 x L15
65 FUNDS AVAILABLE END OF YEAR	Fund balance at the end of the fiscal year minus working capital; must be maintained at preset level and used as a control to determine service charge increases; L65 = L63 - L64
MSD DEBT SERVICE COVERAGE CALCULATIONS	
66 GROSS REVENUE	Repeat of L20 for clarity.
67 OPERATING EXPENSES	Repeat of L41 for clarity.
69 NET REVENUE	Gross revenue minus operating expenses; L69 = L66 - L67
70 PLUS DEPRECIATION	Depreciation from 1981-82 Budget for FY 82; amount inflated 8.3% per year when required for each succeeding year; input each year.
72 NET REV + DEPR (A)	Net revenue plus depreciation (labeled as A); L72 = L69 + L70

Line Number and Title	Description and Calculations
73 TOTAL MSD DEBT SERVICE	Repeat of L60 for clarity.
74 TOTAL DEBT SERVICE COVERAGE	Ratio of net revenue plus depreciation to total MSD debt service; $L74 = \frac{L72}{L73}$
75 (A) LESS NON-REV DEBT SUC	Net revenue plus depreciation minus MSD non-revenue debt service; L75 = L72 - L58
76 MSD REVENUE DEBT SERVICE	Repeat of L52 for clarity.
77 MSD DEBT SERVICE COVERAGE	Ratio of net revenue plus depreciation minus MSD non-revenue debt service to MSD revenue debt service; must be 1.10 or greater; used as a control to determine service charge increases; $L77 = \frac{L75}{L76}$

NOTES:

1. L06 is the value of line number 06 for the fiscal year being computed.
2. PRIOR is defined as being the prior fiscal year's value for the given line, i.e., if current fiscal year is 1983, PRIOR L05 means the value for L05 for FY 82.
3. Rounding routines used in intermediate calculations.

LINE DESCRIPTIONS AND CALCULATIONS USED
IN THE MSD CASH FLOW MODEL
FOR
1971 CONSTRUCTION FUND
AND
MASTER PLAN FUND

Line Number and Title	Description and Calculations
50 BOND ISSUE REQUIRED	Bond proceeds plus one year's debt service, on total issue plus 1% of total issue for costs of issue; $L50 = \frac{L01}{0.880454}$
INCOME	
01 BOND PROCEEDS	Actual bond proceeds required when cash flow program predicts a deficit; input each year.
02 INVESTMENT INCOME	Eight percent of the following: Fund balance at the beginning of the year, plus bond proceeds, plus fifty percent of federal grant and assessment recoveries, less fifty percent of expenditures; $L02 = 0.08 \times [L23 + L01 + 0.50 \times (L06 + L08 + L11) - 0.50 \times L20]$
09 CONNECTION FEES	Connection fees received during each fiscal year based on direct connections estimated for each project; input each year.
03 OTHER INCOME	Other income; input each year.
05 TOTAL INCOME	Total income; $L05 = L01 + L02 + L09 + L03$
RECOVERIES	
06 FEDERAL GRANTS	Seventy-five percent of eligible costs of all tasks except force account (federal grant contributions from the appropriate fund in the Capital Projects Budget Reports); input each year.
07 GENERAL OPERATING FUND	All force account costs, entered to offset the same amount included in L16 NEW CONSTRUCTION; (GOF contributions from the appropriate fund in the Capital Projects Budget Reports); input each year.

Line Number and Title	Description and Calculations
08 ASSESSMENTS FOR MP	One hundred percent of assessable costs except force account for Master Plan assessment projects; all costs recovered in the fiscal year 90 days after construction is completed; input each year.
11 OTHER ASSESSMENTS	One hundred percent of assessable costs except force account for 1971 Construction Fund assessment projects; all costs received in the fiscal year 90 days after construction is completed; input each year.
10 OTHER	Recoveries from developers under the excess cost policy; input each year.
15 TOTAL RECOVERIES	Total of all recoveries; L15 = L06 + L07 + L08 + L11 + L10
EXPENSES	
16 NEW CONSTRUCTION	Total costs of all projects during fiscal year including force account; General Operating Fund recoveries, L07, entered to offset the included force account costs in L16; input each year.
17 OTHER	Other expenses; input each year.
20 TOTAL EXPENSES	Total expenses; L20 = L16 + L17
21 NET INCOME + (-) EXPENSES	Income plus recoveries, less expenses; L21 = L05 + L15 - L20
23 FUND BALANCE BEG OF YEAR	Fund balance and the end of the previous year carried over; FY 82 equals fund balance at the end of FY 81. L23 = PRIOR L24
24 FUND BALANCE END OF YEAR	Net income plus fund balance at the beginning of the year; L24 = L23 + L21.
25 LESS WORKING CAPITAL	Twenty-five percent of fiscal year's federal grant recoveries; L25 = 0.25 x L06.
30 FUNDS AVAILABLE END OF YEAR	Fund balance at the end of the fiscal year minus working capital; must be positive and used to control amount of bond proceeds needed when deficit is predicted.

NOTES:

1. L06 is the value of line number 06 for the fiscal year being computed.
2. PRIOR is defined as being the prior fiscal year's value for the given line, i.e., if current fiscal year is 1983, PRIOR L05 means the value for L05 for FY 82.
3. Rounding routines used in intermediate calculations.

LINE DESCRIPTIONS AND CALCULATIONS USED IN THE MSD CASH FLOW MODEL FOR GENERAL OPERATING FUND ESTIMATE OF EXPENDITURES

Line Number and Title	Description and Calculations
05 ADMIN, O&M COST BASE	FY 82 budgeted administration, operation and maintenance costs that are not affected by different scenarios; additional costs that could be changed due to the different schedules or assumptions are listed in the lines below; input each year.
07 ONE TIME EXPENSE (1)	One time expenses which have been identified; not inflated; input each year.
06 POWER COST BASE	All FY 82 budgeted power related operational costs not specifically listed below; input each year.
MF SIDESTREAM TP (2)	
08 POWER	Estimated power costs for operating the proposed Morris Forman Sidestream Treatment Plant; input each year.
09 OTHER	All other estimated O&M costs related to the proposed Morris Forman Sidestream Treatment Plant; input each year.
12 MORRIS FORMAN OTHER RCAP	All additional O&M costs related to the Morris Forman Revised Corrective Action Plan; input each year.
14 DROP IN MFWTP POWER $ (3)	Drop in the power cost at the Morris Forman Plant due to the reduced flow proposed to be diverted to the West County Wastewater Treatment Plant; input each year.
16 ADD SEWER MAINT: NEW (4)	Additional sewer maintenance as a result of constructing new sewers presently identified; total accumulated mileage input each year; L16 = (Miles of Sewer) * $1,200/Mile
18 ADD SEWER MAINT: ACQ (5)	Additional sewer maintenance as a result of acquiring existing WTP systems; total accumulated mileage input each year; L18 = (Miles of Sewer) * $2,000/Mile
20 CUST SERV: NEW CUST (6)	Customer service cost for new customers; total accumulated new customers each year for all service areas input each year; L20 = Customers * $11.00/Customer

Line Number and Title	Description and Calculations
WEST CO PUMP STATION (7)	
22 POWER	FY 82 budgeted power costs for operating the West County Pump Station; input each year.
24 OTHER	All other FY 82 budgeted O&M costs related to the West County Pump Station; input each year.
WEST COUNTY WTP (8)	
26 SLUDGE DISPOSAL	Estimated sludge disposal costs based on expected flows to the proposed West County Wastewater Treatment Plant; input each year.
28 POWER	Estimated power costs based on expected flows to the proposed West County Wastewater Treatment Plant; input each year.
30 OTHER	All other estimated O&M costs related to the proposed West County Wastewater Treatment Plant; input each year.
NORTHERN DITCH PS (9)	
32 POWER	FY 82 budgeted power costs for operating the Northern Ditch Pump Station; input each year.
34 OTHER	All other FY 82 budgeted O&M costs related to the Northern Ditch Pump Station; input each year.
OKOLONA LIFT STA - 7 (10)	
36 POWER	Estimated power costs for seven Okolona lift stations; based on historical MSD lift station data; input each year.
38 OTHER	All other estimated O&M for seven Okolona lift stations; based on historical MSD lift station data; input each year.
VILLA ANA WTP (11)	
40 POWER	FY 82 budgeted power costs for operating the Villa Ana Wastewater Treatment Plant; input each year.
42 OTHER	All other FY 82 budgeted O&M costs related to the Villa Ana Wastewater Treatment Plant; input each year.

Line Number and Title	Description and Calculations
NORTH COUNTY WTP (12)	
44 SLUDGE DISPOSAL	Estimated sludge disposal costs based on expected flows to the proposed North County Wastewater Treatment Plant; input each year.
46 POWER	Estimated power costs based on expected flows to the proposed North County Wastewater Treatment Plant; input each year.
48 OTHER	All other estimated O&M costs related to the proposed North County Wastewater Treatment Plant; input each year.
GOOSE CREEK PS (13)	
50 POWER	Estimated power costs based on expected flows to the proposed Goose Creek Pump Station; input each year.
52 OTHER	All other estimated O&M costs related to the proposed Goose Creek Pump Station; input each year.
54 TOTALS UNINFLATED POWER	Total of all uninflated power related lines; L54 = L06 + L08 + L14 + L22 + L28 + L32 + L36 + L40 + L46 + L50
56 OTHER	Total of all other uninflated costs; L56 = (Total of Lines 05 thru 52) - L54
58 TOTALS	Total uninflated power and other costs; L58 = L54 + L56
60 TOTALS INFLATED POWER	Total inflated power cost; inflated at power percentage (%) listed in title each year beginning in the second column; $L60 = L54 * \left(1 + \frac{\%}{100}\right)^{(Col-1)}$ For Col=1 to 14
62 OTHER	Total inflated other costs; inflated at other percentage (%) inflated rate listed in title each year beginning in the second column; L07 ONE TIME EXPENSE not inflated; $L62 = (L56 - L07) * \left(1 + \frac{\%}{100}\right)^{(Col-1)} + L07$
64 TOTALS	Total inflated costs; L64 = L60 + L62

NOTES:

1. L06 is the value for line number 06 for the fiscal year being computed.
2. Rounding routines used in intermediate calculations.
3. Numbers at the end of the description lines refer to notes at the bottom of the General Operating Fund Estimate of Expenditures report.